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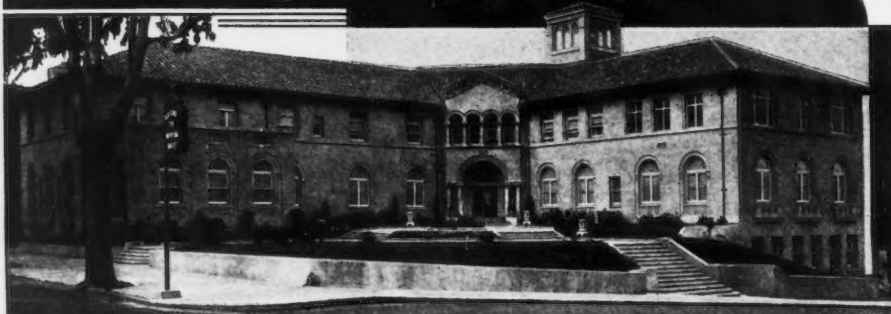
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VOL. 41

DECEMBER, 1934

No. 6

## THE COMMON COLD\*

By K. F. MEYER, Ph. D.  
San Francisco

DISCUSSION by Francis Scott Smyth, M.D., San Francisco; George Piness, M.D., Los Angeles; William J. Kerr, M.D., San Francisco.

ONE approaches a discussion of this subject with a great deal of trepidation, for various reasons. First, because the splendid little book "Our Common Enemy: Colds," by the editors of "Fortune in Consultation with Eminent Physicians" (Robert M. McBride and Company, New York, Third Edition, 1934), has already cleared up a world of misinformation. In a most readable style, it presents a controversial subject and discusses the means to prevent and cure a cold. Vaccination receives benevolent sanction, ultraviolet rays and chlorin are treated with justified skepticism, while changes in diet are critically analyzed. Secondly, it is impossible for one mere mortal to review the rapidly increasing and scattered literature on the subject; and, thirdly, an epidemiologist is obviously not qualified to condense in a short communication the most important facts which may serve as guides for future researches. However, a humble attempt is herewith made.

### ACUTE RESPIRATORY DISEASES A LARGE FACTOR IN MORBIDITY AND MORTALITY RATES

No one will deny that the acute respiratory diseases assume a most important position in the morbidity and mortality rates of any civilized community. This is particularly true since medical science has so far failed to contribute an effective method either of prophylaxis or cure. Although of worldwide distribution and common occurrence, the common cold has only in recent epochs attracted attention. Consequently, the information as to the actual prevalence in different parts of the world, and at different times, is quite meager. It is admitted, and in part substantiated by observations on selected groups, that the tendency for recurrent attacks—on the average two per person per year

in a temperate climate—induce, in the aggregate, a tremendous loss in working time and efficiency of a population. Statistical data are difficult to collect on account of the inherent uncertainty of distinguishing between the common cold, a mild attack of influenza, a sinusitis or an allergic rhinitis. By common agreement, a mild respiratory catarrh is reported as a cold, while a more severe attack with fever is called influenza. Yet, an epidemic of a severe respiratory infection is quite generally designated as influenza. The relationship of pandemic influenza to annual or inter-epidemic influenza is by no means clear, and must by necessity encourage confusion. Various irritants, such as dust, chemical fumes, smoke, pollens, etc., can cause an acute catarrhal condition of the nose. This type of "cold" is, as a rule, described as an allergic, vasomotor rhinitis or perennial hay fever. A great deal of detective work is necessary properly to diagnose and identify these conditions. Such a state of affairs complicates the collection of accurate epidemiologic data. One is justified, therefore, in making the bold statement that the "common cold" recognized in medical practice is certainly not a definite single disease. Experience has taught that the most frequently observed colds are contagious, and thus differ from the allergic catarrhs which are nonorganismal and noninfectious.

### RECENT EVIDENCE CONCERNING THE INFECTIOUSNESS OF "COLDS"

What recent evidence has been presented to prove the infectiousness of a cold? Heinbecker and Irvine-Jones (1929), during a trip up the west coast of Greenland, noted that in certain of the settlements every native was the victim of an acute respiratory tract infection, while in others no evidence of such infection was present. Careful surveys revealed that, in the former, some contact had invariably been made with the outside world prior to their coming, while in the latter group, within from forty-eight to seventy-two hours after their arrival, all the natives developed acute respiratory disturbances with sneezing, coughing and spitting. Farther north, among the polar Eskimos, where it was certain that no outside contact had been made during that year, there

\* From the George Williams Hooper Foundation, University of California, San Francisco, California.

Read before the Pediatric Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.

was never the slightest evidence of acute respiratory tract disease at the time of the arrival of the expedition, but within seventy-two hours nearly every Eskimo of the settlement developed such a malady. Epidemiologic investigations by Burky and Smillie (1929) in southern Alabama and in Labrador, and by Milani and Smillie (1931) on the Island of St. John (U. S. Virgin Islands, West Indies), indicate that the colds with the customary nasopharyngeal picture are infectious, and spread by direct contact with an incubation period of one to three days. However, the latter investigators present evidence which strongly incriminates environmental influences—for example, a drop in atmospheric temperature—as predisposing, if not inciting, factors in the causation of acute colds.

In a series of illuminating experiments on human volunteers housed during the period of observation in a room in which the temperature and humidity were carefully controlled, Kerr and Lagen failed to secure evidence that the common cold is transmissible. Neither intimate contact with individuals suffering from a cold, nor the direct instillation of his unfiltered nasal secretions, conveyed the disease from man to man. These and other observations should caution us not to accept unconditionally the infectiousness of the common cold. A study of the predisposing factors along physiological lines is obviously indicated.

A chance observation by Long, Bliss and Carpenter, in connection with their studies on respiratory infections in chimpanzees, indicates that the common cold is transmissible during the incubation period. Under carefully controlled conditions, two of nine apes developed typical colds following contact with an attendant who was late in the incubation stage of a common cold. These reports, together with those of Jordan, Norton and Sharp, and Winholt and Jordan and previous observations, amply confirm the general epidemiologic evidence that one group of "colds" is contagious or infectious.

#### POSSIBLE NATURE OF THE INFECTIVE AGENT

However, concerning the nature of the infective agent, no agreement has as yet been reached. Two possibilities are mentioned, and evidence in favor of *bacterial* and *virus colds* has been presented. It appears profitable to investigate the intimate relationship between pathogens, whether bacteria or viruses, and the upper respiratory tract symptoms.

1. *Bacterial Colds*.—After the discoveries by Pasteur and Koch, attention was turned to the bacteriological investigation of the diseases of the respiratory tract including the common cold. The earlier workers believed that colds were caused by various kinds of bacteria such as the Pfeiffer's bacillus, pneumococci, streptococci, micrococcus catarrhalis, Friedländer's bacillus, etc. The controversies as to the cause of pandemic influenza led to the belief that the true disease incitant responsible for this scourge was some invisible filter-passer, and that B. influenza was merely a secondary invader to the virus infection. This idea was soon accepted for the common cold, and it has been the leading conception in the current medical

literature. In fact, views which are not in harmony with this conception on the etiology remain submerged. In recent years, however, a number of careful studies have been published. They cast doubt on the virus theory of colds. In fact, they definitely prove that bacteria, in particular B. influenzae and pneumococci, are the primary causes of colds. Independently Webster and Hughes, Webster and Clow, Parks and others in America, and Thomson and Thomson, and Hoyle in England, after careful research extending over several years, both during health and during colds, conclude that these microorganisms are the primary causes of attacks of colds. Persons free of pneumococci, B. influenzae and streptococcus hemolyticus were found, in general, free of coryza, sore throat, influenzal and sinus attacks. During or following an attack, the persons become carriers of the organisms for a longer or shorter period. Boyle found that the attacks were associated with a high incidence of B. influenzae (71 per cent), pneumococci (67 per cent) and short-chained streptococci (48 per cent). Particularly instructive are, however, the lessons to be learned from these careful studies, that it is almost impossible to incriminate any particular organism as a cause of colds until the bacterial flora of a given number of individuals has been thoroughly studied for a period of years, not only during the periods of colds but also during health. It is equally important to stress the fact that the recent studies on a limited number of individuals contradict the mass observations on a large number of persons whose bacterial flora was determined during health and during colds by Noble and Brainard, Shibley, Dochez and Mills, Burky and Smillie, Blackburn, Boston and others. Since they failed to find any material difference in the bacterial flora of the respiratory tract during health or during colds, they either state definitely or infer that the bacteria play the part of secondary invaders. Yet, the most ardent believer in the filterable virus as the sole cause of the highly contagious cold admits that bacterial infections, due to hemolytic streptococci, produce a type of pharyngitis difficult to distinguish from the common forms of respiratory infection.

#### A CLASSIFICATION OF BACTERIAL COLDS

Parks has shown that in an institution of children, the boys living on one side of the street developed colds and pneumonias, while the girls, who were housed in a separate place, remained free from the disease. A filterable virus would have spread to the other street, but the causative pneumococci did not do so. For the sake of future inquiries, the clinical bacteriologist may classify the bacterial colds in their order of importance as follows:

(a) *Pneumococcal Colds*.—These are due to different types of pneumococci; clinically, this type of cold induces a purulent rhinitis frequently complicated with sinusitis, otitis media and pneumonia.

(b) *Pfeiffer's Bacillus Colds*.—These are caused by several varieties of this organism. Frequently responsible for a tracheitis and other complications.



(c) *Micrococcus Catarrhalis* and *Streptococcus Colds*.—The frequency and the significance of this type is not definitely established. The etiologic rôle of the green streptococci thus far presented is not convincing. It is claimed that these organisms are capable of causing colds of the copious watery type. Aside from the organisms mentioned, cases have been reported in which the *B. bronchisepticus* and various other bacteria assumed a significant numerical predominance.

2. *Virus Colds*.—Following the early experiments by Kruse (1914), Foster (1916 and 1917), Dodd (1917), Schmidt (1920), it became generally recognized that certain forms of coryza may be caused by agents present in the Berkefeld N filtrates of nasal washings obtained from patients with acute nasal catarrhs. Subsequently, Olitzsky and McCartney, while studying *B. pneumosintes*, encountered in the filtered nasal secretion from fresh cases of common colds in man an incitant which produced a definite coryza in some of the volunteers. However, the evidence was by no means convincing, since no controls for the irritative properties of the filtrates had been included. Little progress was made until Dochez, Shibley and Mills accidentally discovered that the "common cold" of man, or something closely resembling it from a clinical standpoint, apparently occurs among anthropoid apes. Thus, they attempted in 1929 to transmit "colds" from human beings to apes by the intranasal injection of filtered nasal washings from human patients. The transmission of colds was successful in about half of the inoculated animals. Very great difficulty was encountered in securing adequate controls on account of the prevalence of colds among the human beings which furnished the nasal washings. They repeated the same experiments during the summer (June and July). In no case did the filtrates from healthy subjects, during this period, give rise to catarrhal or other lesions in the apes inoculated with them. In subsequent experimental series on young chimpanzees, Dochez, Mills and Kneeland reproduced with regularity, by intranasal inoculations with bacteria free Seitz filtrates of nasopharyngeal washings from individuals with acute colds (within twenty-four to forty-eight hours), a definite respiratory disease consisting of sneezing, coughing, nasal obstruction, and mucoid or mucopurulent nasal discharge. The manifestations persisted for five days to two weeks. These experimental infections are communicable by contact to healthy chimpanzees placed in the same cage, and may be passed in series from animal to animal over a period of years. It is of interest that, coincident with the symptoms, various pathogenic organisms, influenza bacillus, hemolytic streptococci, formerly inconspicuous, develop in great numbers and spread over the mucous membranes. In fact, acutely-ill apes may convey these organisms to cage mates readily, while carriers rarely transfer bacteria by contact in the absence of an acute respiratory disease. Experimental transmission of colds on human volunteers revealed the same cycle of events as seen in the chimpanzees. The intranasal instillation of bacteria free filtrates from individuals suffering from acute colds resulted

after an incubation time of about twenty-four hours in a typical cold lasting from one to two weeks. Subsequent experiments indicated that the virus of the common cold survives for a considerable length of time after removal from the human pharynx, and that it reproduces itself in vitro when cultivated in the Maitland medium. In a more recent series Dochez succeeded in the cultivation of the virus directly from the nasopharyngeal washings obtained from a patient within twenty-four hours of the onset of a typical acute cold. The culture was passed through seventeen generations, and successfully infected one of three human volunteers.

Long, Doull, Bourn and McComb (1931) experimented along similar lines and succeeded in transmitting the common cold to human subjects by nasal instillations of nasopharyngeal washings obtained from patients suffering from the natural infection. Altogether, twenty inoculations were made from nine subjects with natural colds into nineteen volunteers. Eleven of these tests were successful in setting up colds. The incubation period was twenty to seventy hours; no cold developed after three days. In contrast to the observations of Dochez, these investigators failed to find striking differences between the bacterial flora of the nasopharynx studied during the period of initial quarantine and the period of experimental infection.

A third group of workers (Powell and Clowes, 1931) record a series of experiments carried out on human volunteers with a culture of "common cold" virus that had been carried through thirty-one generations in chick embryo tissue culture medium. Of thirty-two persons injected with the virus culture twenty-two developed colds.

#### CRITICISMS OF THE EXPERIMENTS

All these experiments have been criticized on the basis that the irritative, perhaps allergic properties of the filtrates were not properly controlled. This is true, since in one experiment a volunteer received an active culture heated for half an hour at 80 degrees centigrade; there appeared symptoms of upper respiratory irritation which, however, lasted only less than twenty-four hours. Doubtless, future experimenters must take these facts into consideration. Another criticism, voiced even more generally, objects to the relegation of the pneumococci, *B. influenzae* and streptococci to the status of secondary invaders, and the desire to make the etiology of the "common cold" a very simple process. That it is in all probability a complex process is indicated by the observations on animals.

Recent researches into the nature of a disease—swine influenza—resembling the common cold of man have shown that a hemophilic bacillus joins a filterable virus in helping to produce the respiratory disease. Variations in the invasiveness of the bacillus may profoundly modify the clinical course of the disease.

Even if it is recognized that this and other animal respiratory infections are dissimilar to the human cold, Th. Smith (1931) is doubtless cor-

rect when he makes the significant statement: "All species of animals have their respiratory diseases; and it would seem that if this enormous material, involving a variety of hosts and a still greater variety of microorganisms, could be brought together by some master mind synthetically inclined, the cause of human respiratory affection would literally drop into our laps."

The possible existence of filter-passing forms of bacteria must not be overlooked. It is indeed difficult to predict the influence of these newer discoveries on the bacteriology of the respiratory tract. Finally, it must be remembered also that many kinds of bacteria and viruses induce an inflammatory catarrh of the mucous membrane of the intestinal tract. Analogous conditions doubtless operate in the respiratory tract; and although one cannot overlook the important researches of Dochez and others, it is advisable to await further evidence, particularly concerning the mutual relationship of bacteria and viruses in the causation of respiratory disease.

#### THE "SOIL" OF THE "COLD"

In the etiology of the common cold, the "soil" is just as important as the seed. Future investigations must carefully consider the biochemistry of the blood and the secretions of the mucous membrane. By far, the greatest amount of research has been bacteriological, but the physiology and biochemistry of the patients liable to colds have been neglected. Some individuals have an inborn susceptibility to colds even though they have no nasal defects or late foci of infections. Moreover, an unusual susceptibility towards certain types of bacteria may be noted.

One would like to know more concerning the influence of chilling of the body surface on the ciliary mechanism and the mucous membrane of the respiratory tract, rendering it more susceptible to attack by microorganisms. Statistical, as well as experimental proof clearly show that chilling is a very important predisposing cause. Cold weather increases the chance of infection and, in a community the incidence of colds rises promptly after a sudden cold spell of weather.

Many other factors, including gastric upsets, are doubtless of importance. Poorly ventilated rooms increase the chances of droplet infection; fatigue reduces the general resistance, and anatomical and physiological defects impede the natural self-cleansing action of the nose, and create areas of stagnation well suited for localized microbial growth. The influence of diets and, in particular, vitamins, is by no means clear. Apparently, an abundance of the antirachitic vitamin does not increase the immunity to respiratory infections. There is no evidence that respiratory infections are due to deficiencies in vitamin A. Lack of vitamin C, on the other hand, induces a heightened local susceptibility with marked general loss of resistance.

While common colds are never fatal, the complications and sequelae cause great misery and far-reaching permanent damage. It is unnecessary to stress the disastrous effects of sinusitis, otitis

media, mastoiditis, pneumonia, endocarditis, etc. Why certain epidemics of colds give rise to a much higher percentage of these complications than others, is not known.

#### PREVENTION OF COLDS

The prevention of colds is quite generally directed towards the avoiding of the infection and in guarding against the predisposing causes. The modern conceptions of contact infection have encouraged general cleanliness and hygiene. If carried out faithfully by keeping a patient with a cold in bed and in isolation, this course of action will not only cure the cold but prevent it from spreading to others. This is the only advice which is scientifically justified. Since colds are certainly not definite single diseases, preventive vaccination remains an uncertain procedure. On the other hand, the curative treatment with autogenous vaccine preparations may be beneficial, although it may not be specific. Particularly, the local application of vaccine to the nasal cavities, to the throat and sinuses deserves further consideration.

Hooper Foundation for Medical Research.

#### DISCUSSION

FRANCIS SCOTT SMYTH, M.D. (University of California Hospital, San Francisco).—Doctor Meyer's discussion of the common cold is excellent. He points with sober consideration to the multiplicity of factors, bacteriological and clinical, which make any single theory untenable. At the present time "the 'common cold,' as recognized in medical practice, is not a definite single disease."

Pediatricians often observe the increased incidence of colds in school children previously carefully sheltered in their homes. The communicable element of colds can be repeatedly verified, yet often a condition very similar, clinically, may be found to be on an allergic basis. We can rejoice in the increased care with which the common cold is now considered, but as Doctor Meyer points out, we are not yet ready to accept a single etiology.

A most frequent failing in medical science has been the ready acceptance of current theories which have been well publicized. Researches, which allow no sweeping conclusions, have been none the less so interpreted by enthusiasts. All too frequently this has led to overstatement, only checked by the inevitable reaction.

✱

GEORGE PINES, M.D. (1136 West Sixth Street, Los Angeles).—The etiology of the common cold is still a mystery to us. Many theories have been advanced, but no one of the many researches carried on to date has been able to establish a specific cause for this most ordinary disease. My own interest in the common cold lies in the point of view that many of the so-called colds are in reality attacks of hay fever, that is, allergic vasomotor rhinitis; and it is not beyond reason to think that the statistics of the incidence of the common cold are vitiated by the frequent occurrence of this manifestation of allergy. Its importance, at least to a certain portion of the population, is certainly as great from the point of view of disability as is the true common cold, and it is not out of place to point out at this time some of its characteristics.

The onset is usually sudden in the early morning hours, but symptoms do not ordinarily persist throughout the day. Characteristically there is a free interval during midday, with a recurrence of symptoms at nightfall. The course is usually much more prolonged than that of the common cold, and of course when seasonal in character it is not likely to be confused with the common cold. The symptoms are usually rhinorrhea, sneezing, nasal obstruction, and itching of

the eyes, nose or throat. Epiphora and burning and smarting of the conjunctivae often accompany the above symptoms and, in fact, may replace them. Unlike the common cold, of course, from our knowledge of the nature of the allergic disturbance a hay fever attack is not contagious, and a fever is rarely observed unless bronchial asthma supervenes, which is not unusual, although it is often overlooked because the only symptom of the involvement of the lower respiratory tract may be in the nature of a bronchitis with cough.

The differential diagnosis between common cold and allergic vasomotor rhinitis is simple, if the obvious symptoms are not dismissed without a thorough history and physical examination. The history, of course, will often show a positive heredity of some type of allergy, or a story of some other allergic disturbance such as urticaria, eczema, or asthma. In addition to this an examination of the mucous membrane of the nose and throat shows a characteristic pallid edematous mucous membrane, often accompanied by mucoid and even polypoid degeneration, and lymphoid hypertrophy in the nasal pharynx.

In calling attention to the frequency with which one meets allergic vasomotor rhinitis in practice, we are in accord with Doctor Meyer's statement that the common cold is not a single disease; and we wish to point out that we can separate allergic vasomotor rhinitis as one of the diseases which contributes to the truth of this statement. Doctor Meyer's discussion of the economic implications resulting from the disability caused by the common cold applies with just as great significance to allergic vasomotor rhinitis, particularly in that extensive group of humans whom we now recognize as allergic.

✱

WILLIAM J. KERR, M. D. (University of California Hospital, San Francisco).—Doctor Meyer has ably reviewed the prevailing scientific opinion concerning the common cold. The identification of certain clinical states, such as allergic rhinitis, influenza and the common cold, has been difficult, and will remain so until the etiological factors are better known. It should be obvious to anyone that a variety of inciting agents, from without and within the body, may cause a rhinitis resembling a common cold. Since pathogenic bacteria were recognized, attempts have been made to incriminate one or another of the normal inhabitants of the airways, and more recently the ultra-microscopic forms, or filterable viruses, have been suggested as inciting causes alone or in conjunction with bacteria.

Unfortunately, very little attention has been given to the physiological mechanisms of the host, aside from specific immune reactions, during the bacteriological era. If changes in the weather, fatigue, faulty nutrition and other factors making hemostasis difficult are operative, it should be possible to analyze their relationship to the onset of the common cold.

With a view to the study of the circulatory changes occurring in the common cold, Lagen and I have tried to reproduce the common cold so that we could observe the signs during the incubation period, as well as during the various stages of clinical symptoms. We wished to determine in the human being the responses of the heat-regulating mechanisms (skin, kidneys, lungs and respiratory passages) during the progress of the disease.

To date, under carefully controlled environmental conditions, we have been unable to reproduce any symptoms of the common cold by ordinary close exposure of susceptibles to sufferers from the disease, and have not been able to transmit it by direct inoculation of fresh, unfiltered secretions. It is suspected that the filtrates used by some workers are themselves capable of producing a rhinitis, due to the irritating solutions used, which resembles closely a common cold. When we shall have had a sufficiently large series of exposures to satisfy statistical standards, we hope to be able to show that a variety of the disease can be reproduced at will by setting appropriate environmental conditions.

## ROCKY MOUNTAIN SPOTTED FEVER AND ENDEMIC TYPHUS FEVER\*

AS OBSERVED IN CALIFORNIA

By EDWARD L. MUNSON, M. D.  
San Francisco

DISCUSSION by Harlin L. Wynns, M. D., San Francisco;  
W. H. Kellogg, M. D., Berkeley.

### I. ROCKY MOUNTAIN SPOTTED FEVER

A NUMBER of fevers, of typhus-like character, are distributed over the world. Clinically they are characterized by an abrupt onset, continued fever, a spotted rash, prostration, mental disturbance, and a course of several weeks. There is a serological relationship shown in an ability to give the Felix-Weil reaction, in the production of agglutinins for some strain of *Proteus* X. Such relationship is further suggested by the fact that the so-called Rickettsia bodies have been found associated in the tissues of infected animals and arthropods. They further resemble each other in having some insect as the transmitting vector; as shown both by laboratory experiment and by the finding of infected insects in nature. Further, with the exception of epidemic typhus, they are diseases primarily of rodents, and are transmitted by insects from rodent to rodent, and accidentally from rodent to man. While various of these typhus-like diseases occur in Japan, Australia, eastern Africa, Malaya, Brazil, and other places, these need not be mentioned here. The representatives of this group within the United States include the so-called Rocky Mountain spotted fever, endemic typhus fever, and epidemic typhus. The two first-named are the subjects of this brief consideration.

### ROCKY MOUNTAIN SPOTTED FEVER A MISNOMER

The existence of this disease as a clinical entity has been recognized in this country for half a century. First noted as endemic on the Rocky Mountain plateau, it was given this regional nomenclature. However, the relatively recent discovery of cases in portions of the United States remote from the original endemic area indicates that any such geographical designation is a misnomer.

### ETIOLOGY

The etiological agent of the disease is considered to be either the Rickettsia bodies or associated therewith. These are small, intracellular coccoid or bacillary bodies. They have been cultivated in living tissue; but attempts at culture in media free from living cells have failed. The chief reservoir of the infection exists among wild rodents, among which the disease occurs as a mild epizootic. Squirrels, rabbits, prairie dogs, woodchucks, badgers, and other small animals are susceptible; with ground squirrels and rabbits serving as the most important hosts. The transmitting

\*Read before the General Medicine Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.



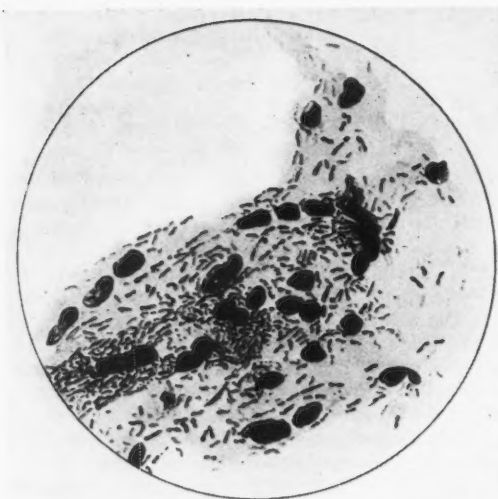


Fig. 1.—Camera lucida drawing of the rickettsiae in a piece of tick muscle. Teased smear preparation Giemsa stained. The tick was proved infected by guinea-pig inoculation.

agents are ticks, of which several varieties are concerned. These transmitting ticks also serve as an arthropod reservoir of the infection. Ticks may be infected in the larval, nymphal and adult stages, and carry the infection through the succeeding stages. The disease is unique among human infections in that the infected female transmits the virus through the egg stage to her progeny. Cattle, horses, deer, and larger animals seem not infected in nature, but are normal hosts for adult ticks and play a large part in the dissemination of the infection.

The varieties of the ticks concerned are the common wood tick, *Dermacentor andersonii*, which transmits the western type of the disease; the dog tick, *Dermacentor variabilis*, which is the chief agent outside the western mountain plateau; with less importance attaching to the Pacific Coast tick, *Dermacentor occidentalis*. The rabbit tick, *Dermacentor parumapertus*, is infectible; but since it does not readily bite man, its importance probably relates to keeping the infection alive among such rodents.

Because Rocky Mountain spotted fever depends upon ticks for its transmission, the occurrence of the disease will depend upon the distribution of these insect vectors. So far, *Dermacentor andersonii* has been found to be endemic in the states of Montana, Wyoming, Colorado, Utah, Nevada, and Idaho; in the eastern parts of Washington and Oregon; in the northern parts of Arizona and New Mexico; in the western parts of South Dakota and Nebraska; and in the eastern part of California. Most of the cases of spotted fever in California have occurred in Lassen and Modoc counties, although they also have been noted in Plumas and other counties. The areas adjoining the chief infected area in California are Washoe County in Nevada, and Klamath, Lake, Baker, Crook, and Grant counties in Oregon. Within the

wide distribution of *Dermacentor andersonii*, over an area of approximately a third of the United States, there are many regions in which this tick is present, but in which spotted fever does not occur. And not only is its infection definitely localized in many instances, but there seems to be an extraordinary variation between local virulences, with resultant wide divergence in local case mortality.

In the above respects, climate and season very likely operate as factors. Analysis of the distribution of *Dermacentor andersonii* and the spotted fever that it transmits, on the basis of meteorological maps, shows that areas of endemicity are sprinkled practically between the annual 50 and 60 degrees Fahrenheit isothermal lines; to be enclosed roughly within an area between latitudes 40 to 47 degrees, and longitudes 110 to 122; under an average annual precipitation of some twenty inches or less; and most commonly found at elevations of from 2,500 to 6,000 feet.

The eastern form of spotted fever is transmitted by *Dermacentor variabilis*. This tick has been found in all the states of the Union other than those already named. In addition, California, Colorado, Oregon, Montana, and South Dakota report the presence of both species in certain localities. *Dermacentor variabilis* is closely related to *Dermacentor andersonii*; has been experimentally proved capable of conveying spotted fever, with cases of fever occurring when *Dermacentor variabilis* was active; and cross immunity exists between the eastern and western strains—though neither immunizes against typhus. The latter fact removes the tick from suspicion as a possible carrier of typhus. As in the West, the eastern foci of the disease are localized. While the tick is an essential vector, that the presence of the disease in man is affected by some other factor is suggested by the fact that ticks may be locally plentiful, yet spotted fever be absent.

#### LIFE HISTORY OF THE TICK

Since the bite of the infected tick is the portal of entry for the infection, the life history and feeding habits of the genus *Dermacentor* become of importance; and especially in the carrying over of the infection from one season to the next. The insect develops through the egg, larva, nymph and adult stages; with the normal cycle of development requiring about two years.

The adult female feeds to engorgement, drops to the ground, lays 2,000 to 6,000 eggs, and dies. The eggs hatch in three or four weeks to several months, depending on temperature. The eggs hatch into six-legged larvae. The larval tick climbs grass or twigs, whence it drops off on a warm-blooded host, presumably a rodent. It feeds to repletion, taking about two to four days. It then drops off, remains dormant several weeks, moults, and becomes an eight-legged nymph.

The nymph crawls into a sheltered place, and goes into hibernation. At the beginning of the next warm season it becomes active, and seeks a warm-blooded host. It feeds to engorgement for



four to eight days, drops off, stays dormant on the ground for several weeks, moults, and becomes adult.

The adult searches for a host, attaches, feeds, copulates. After about ten days to two weeks the female drops off, oviposits, and completes its cycle. If the adult fails to find a host it will hibernate over another winter.

*Dermacentor andersonii* are three-host ticks, and will feed on practically any warm-blood animal, including man. The immature forms are usually found on small animals, as rodents; and the larger ones on cattle, deer, etc. Many ticks must necessarily not find a host, and ultimately starve to death. But while lack of food inhibits development, ticks can stand long periods of starvation; and adults can live two years or longer without food. Such resistance, combined with the transmission of the virus through all developmental stages, adds greatly to the difficulties of the epidemiological problem.

Not only is *Dermacentor andersonii* endemic only in areas of considerable climatic similarity, but it is very responsive to the changes of season. It is about the first insect to appear in the spring, is active under comparatively low temperatures, and passes into a period of dormancy during the hot summer period, when other insects present their greatest activity; reappearing with lesser numbers and reduced activity during a relatively brief period in early fall. Its curve of insect incidence is, therefore, a double one. Dyer states that it may appear in Montana as early as February, is most prevalent from the middle of March to the middle of June, and a few can be found as late as September. Professor Herms of the University of California informs me that *Dermacentor andersonii* in California has its zero of effective temperature at about 35 degrees Fahrenheit in California; and that adults will emerge when the mean daily ranges of temperature are between 38 and 42 degrees Fahrenheit for several consecutive days. He states that the temperature at which dormancy is produced in the fall seems to be about 10 to 15 degrees Fahrenheit higher than that necessary to produce emergence in the spring.

In the East, *Dermacentor variabilis* usually appears in March, is most prevalent from the middle of May to that of July, and is occasionally found as late as October or November. This tick occurs endemically under conditions of lower elevations and higher temperatures, with a much smaller proportion of human cases. Cold late springs, or very hot, dry summers, greatly retard tick activity; and the latter in turn is the determining factor in the development of spotted fever cases. At high temperatures ticks require considerable humidity, and do not well withstand prolonged dryness. Cold delays development of the immature forms of ticks; but even low temperatures of 50 to 60 degrees Fahrenheit below zero will not destroy *Dermacentor andersonii* in any stage; nor will it destroy the virulence of the spotted-fever virus. All forms hibernate over the winter season; and this again adds to the difficulties of the epidemiological problem.

#### RELATION OF INCIDENCE AND SEASON

The controlling relation of season to the occurrence of cases of spotted fever in California is shown by the monthly incidence of the disease for the period of 1917-1933, as follows:

March .....	8
April .....	20
May .....	30
June .....	18
July .....	12
August .....	2
September .....	1
October .....	1
November .....	0
December .....	0
January .....	0
February .....	0
Total .....	92

These figures show conclusively the period and relative extent to which spotted fever may enter local clinical calculations. With such definite seasonal incidence, for example, the occurrence of spotted fever in the C. C. C. forestry camps of 1934 may logically be expected to be greater than that experienced in 1933; since in the latter year most of these camps were not established until late in June, when the liability to infection had already begun to wane rapidly. But in 1934 the reoccupancy of many of these completed camps will take place in April or early May, at which time the activities of the ticks, and the opportunities for the spread of their infection will be at their maximum.

#### MORBIDITY STATISTICS

Morbidity statistics as to the occurrence of spotted-fever infection in the United States are probably open to reasonable doubt as to being an understatement. Cases reported are probably those

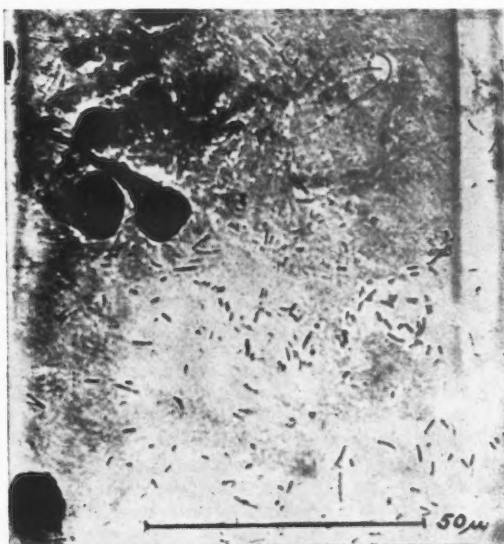


Fig. 2.—Photomicrograph of Giemsa-stained smear of the malpighian tubules of an infected fed adult tick. Rickettsiae-like organisms associated with the disease are abundant in fed infected ticks and approach the size of ordinary bacteria.

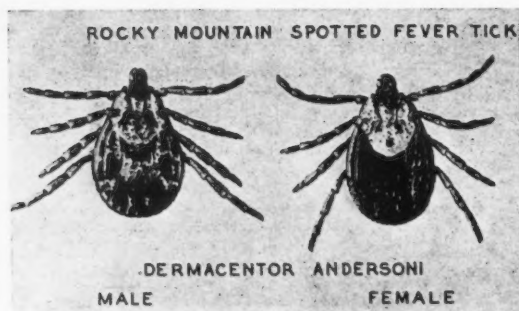


Fig. 3a

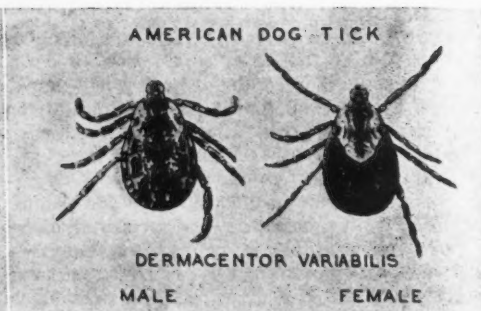


Fig. 3b

which are typical and severe, and permit of definite diagnosis through the presence of the characteristic rash. In spotted-fever infection we have a disease whose local mortality ranges down from 90 to 100 per cent to a complex of trivial and ephemeral symptoms with no mortality whatever, and with no distinctive eruption on which to base a diagnosis. And so far as the number of cases goes, this depends not only on the presence of the infection, and number and activity of the ticks, but upon the number of the population that is under conditions serving to render them ultimate subjects. The areas in the West in which the infection is chiefly prevalent are those in which the population is relatively very sparse and scanty. Dyer estimates that the annual incidence of cases is 500 in the West and 200 in the East; reporting cases from thirteen eastern states whose far greater density of population should theoretically proportionately increase the opportunities for infection.

#### RELATION TO OCCUPATION

As to the relative hazards of occupation, the following figures for California, based on ninety-four consecutive cases, are suggestive:

Sheep herders .....	25
Ranchers and ranch-hands .....	11
School children .....	11
Railroad section hands .....	2
Sheep man .....	1
Mining engineer .....	1
Geologist .....	1
Gold miner .....	1
Traveler .....	1
Laborer .....	1
Carpenter .....	1
Box factory .....	1
Merchant .....	1
Occupation not ascertained .....	36

#### MORTALITY FIGURES

The case mortality varies from as much as 90 per cent in parts of Montana to as low as 5 to 10 per cent in southern Idaho. There is also a mild form known as "Colorado fever" which is common in Colorado and Wyoming and apparently occurs in the northeast part of this state. But even in places habitually presenting this mild type there may be occasional cases of severe typical infections. Out of 113 consecutive cases reported in California, nineteen, or 16.8 per cent, died. This compares with the eastern mortality resulting from infections by *Dermacentor vari-*

*abilis*, which is about 25 per cent, and the high mortality resulting from strains carried by *Dermacentor andersonii* in Montana. In the case of the latter there is marked difference in the higher brackets. Thus in 55 cases in Missoula County the mortality was 65.1 per cent; in 103 cases in Ravalli County, it was 48.5 per cent; in 52 cases in Garfield County, it was 17.3 per cent; and in 57 cases in Musselshell County it was but 7 per cent.

#### DIAGNOSIS

Tick-borne spotted fever is symptomatically most apt to be confused with typhus fever, and in their differential diagnosis a consideration of the attending circumstances is helpful. Typhus fever can be practically ruled out by the fact that tick-borne spotted fever is confined almost exclusively to the spring and summer, corresponding exactly with the tick season and in contrast to the winter prevalence of typhus; that spotted fever is rural rather than urban; that the latter occurs in persons not infested with lice; and that it is in no way associated with poverty, filth and congestion, but, on the contrary, is a disease of the clean, open spaces. Further, close contacts of Rocky Mountain spotted fever do not contract the disease; and Anderson says that "two cases of spotted fever have never been known to occur in the same family in the same season." Finally, most cases of the latter give a history of tick bite about a week before the onset of symptoms.

#### SYMPTOMS

The symptoms of spotted fever are those of sudden onset, with chills, fever, prostration, headache, and insomnia. There may be soreness of joints; and in some cases at outset a soreness and abdominal pain that may simulate appendicitis. The temperature rises rapidly, with morning remissions, very likely reaching 104 to 105 degrees Fahrenheit; and falls by lysis, usually about the sixteenth to twenty-first day. The pulse is high, and in severe cases may be 130 to 160. The rash usually appears on the third or fourth day, but may occur from the second to seventh day. It appears first on the wrists and ankles, and extends rapidly to back, arms, legs, chest, and finally to abdomen. The palms and soles may be involved. The rash is macular, becoming petechial, confluent and ecchymotic in the second week. In severe cases, necrosis of skin may occur; most common



Fig. 4

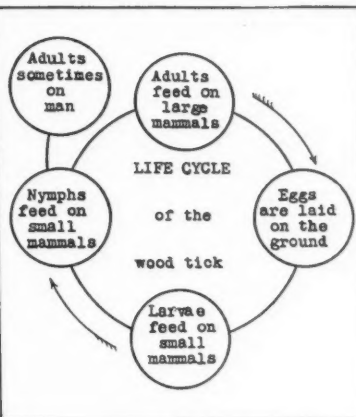


Fig. 5



Fig. 6

Fig. 4.—Map showing by a broken line the approximate known distribution of the wood tick.  
 Fig. 5.—Diagram showing the life cycle of the wood tick and that while the adult tick sometimes bite man this is not a part of the normal cycle.  
 Fig. 6.—The wood tick in the "waiting attitude," with the "head" down, and the third pair of legs grasping the support while the other legs are extended.

on the genitalia, fingers, and toes. The nervous and mental symptoms are very severe. There is delirium, and often coma in fatal cases. Deafness, mental hebetude and visual disturbances may be present for some weeks. Convalescence is slow, but usually without after-results. Cases are more fatal in the aged, and children are better risks.

The laboratory shows definite leukocytosis, and the urine may contain albumin and casts. The Felix-Weil test is positive in nearly all cases, agglutinins being usually produced for *Bacillus proteus* X/19 in a titer of 1:160 or more, and a titer of 1:10,000 may be reached. The identification of the virus is partly positive only, and is made on the effect on laboratory animals. These include an inflammatory condition of the scrotum in guinea-pigs proceeding to ulceration and necrosis, with *Rickettsiae* found in smears from the tunica; the production in rabbits or monkeys of agglutinins to *proteus* X/19; the histological picture in the brains of animals; and cross-immunity tests.

Besides the above typical picture, Ricketts says that "Those who have the greatest experience with the disease in man recognize a mild type in which the characteristic eruption is absent." It may be mentioned that these non-eruptive cases, which are usually termed "Colorado fever," are practically never fatal, and the diagnosis tends to be confused.

There is also a condition known as "tick paralysis," seen now and then in Montana and occurring chiefly in children. The bite of the female tick is followed by a progressive motor paralysis, which usually begins with the lower extremities and tends to be fatal if the respiratory muscles are involved. However, if the tick is found and removed early, improvement is rapid. The condition is believed to be due to the injection of a toxin by the tick, rather than the introduction of a pathogenic organism.

#### VARIATION IN VIRULENCE

While human beings are generally susceptible to the infection of spotted fever, one attack con-

fers immunity. The difference in severity in the clinical pictures relates to the virulence of the virus rather than the resistance of the individual. Parker believes that this virulence is not a constant factor, but is subject to wide variations. He believes that the virus passes the winter in low-grade phases, and that virulence is increased by rise of temperature up to a certain point. He regards the condition as one of reactivation promoted by suitable, yet not too high temperature, but more especially dependent on a blood meal. He considers that the life of virus consists of short periods of high virulence coincident and following the engorgement of each successive stage, and alternating with periods of reduced functional activity in which it is seldom capable of producing more than symptomless infections.

#### TREATMENT

There is no specific treatment for Rocky Mountain spotted fever. Once the disease is established, treatment is limited to that which is symptomatic and supporting.

Efforts at prevention follow two channels. First, the creation of an active immunity in persons liable to be exposed to the infection. Second, efforts to destroy the virus by attacking its insect vectors and animal hosts.

A vaccine prepared from infected *Dermacentor andersonii* has apparently some protective value. This relates not only against infection, but in reducing the severity of the disease. In eleven test cases occurring among the previously inoculated, the mortality was 9 per cent; while in the same number of the uninoculated the mortality was 90.9 per cent. Its use is naturally restricted to those exposed to ticks in known infected areas. The United States Public Health Service has agreed to supply 16,000 doses for use in the C. C. C. camps in this corps area during the present spring.

#### PROPHYLAXIS

Attempts to eliminate the disease by destroying the insect vectors and the animal hosts are faced



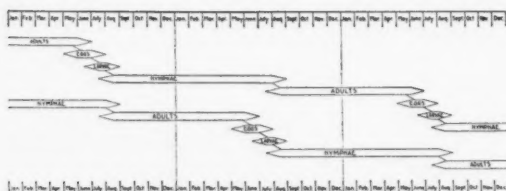


Fig. 7.—Diagram of the seasonal history of the wood tick, showing the approximate duration of each stage. This diagram shows that the adults and nymphae of parallel strains of the tick hibernate and that the life cycle is normally of two years' length. This diagram does not show whether the nymphatae and adults are active and feeding or in hibernation.

with difficulties which may readily be considered as practically insuperable. Not only does the tick transmit the infection from one generation to another, but it survives cold and starvation; and its life history is such that it cannot be attacked in restricted breeding places, as is simplified in the case of collections of water and filth in respect to mosquitoes and flies. Further, the warm-blooded hosts, being wild animals, are refractory to control by man; and can be destroyed only as individuals by such relatively incomplete measures as poisoning, shooting, and trapping. Cultivation or burning over will destroy ticks and their eggs, and at the same time drive away the animal hosts; but it is obvious that such measures are practicable only under very limited conditions. Attempts to destroy ticks by the introduction of a small gnat-like insect, *Ixodiphagus caucurtei*, which is the natural

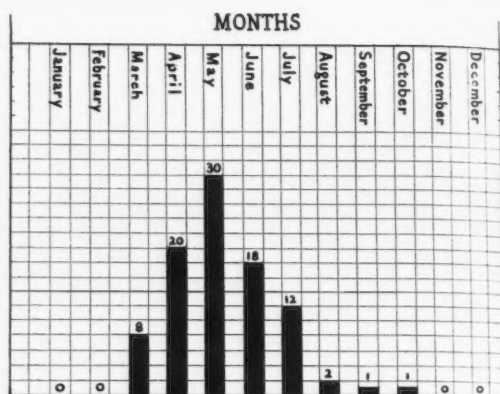


Fig. 8.—Occurrence by months of 92 consecutive cases of Rocky Mountain spotted fever in California.

enemy of the tick and kills it by laying its eggs in the body of the latter, are now being made.

Various textbooks suggest the grazing of sheep as a preventive measure, on the ground that it destroys vegetation and renders the area unattractive to rodents; that the lanolin in the fleece destroys ticks, and that in the entanglement of the wool the males find difficulty in reaching the females and fertilizing them. The practical converse of this picture is seen in the occupational status reported for cases in California, of which nearly half occurred in sheep herders, and about two-thirds in

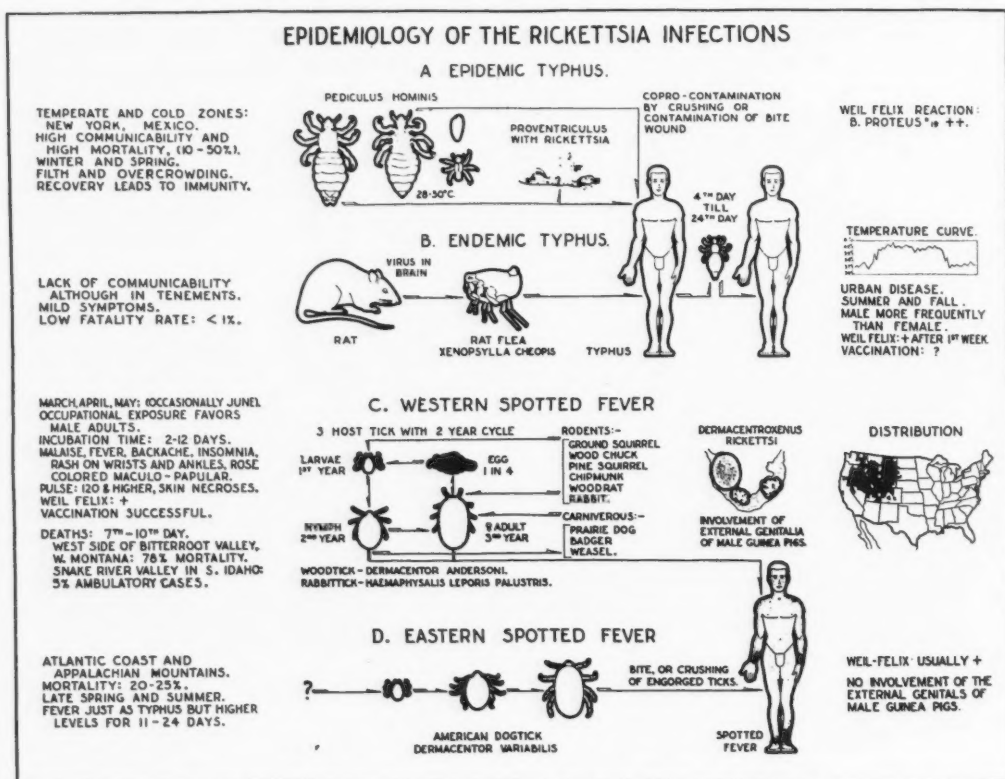


Fig. 9





Fig. 10

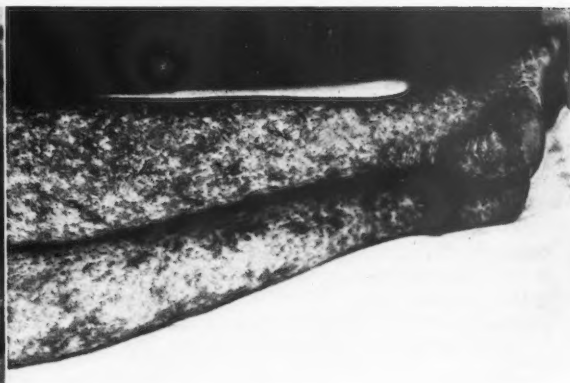


Fig. 11

Fig. 10.—Eighth day appearance of rash in a case of Rocky Mountain spotted fever, which was probably modified by vaccination.

Fig. 11.—Fatal case of Rocky Mountain spotted fever; Photograph taken about the eighth day. Many cases in the Bitter Root Valley, Mont., die before the rash has developed to this stage. (Courtesy of Surg. L. D. Fricks.)

sheep herders and ranchmen. Sheep are not only convenient vehicular carriers of ticks, but by reason of their close association with man they convey them to human beings and their surroundings. It is an axiom in the Rocky Mountain spotted fever country that camping in the vicinity of an old sheep corral is especially hazardous.

For the individual, a completely successful measure for insuring personal prophylaxis consists in staying away from infected tick areas during the season in which these insects are active. Thus, for the same area the trout fisher in the spring might be under considerable danger where the deer hunter in the fall would be absolutely safe. Much protection is afforded by clothing, and ticks less firmly attach and are more readily brushed off of tightly woven cotton fabrics, like khaki. Prompt removal of such as gain access to the body is most important, as the tick apparently has to feed a while before being able to transmit the infection. For this purpose the body and clothing should be examined at least twice a day. Gasoline, kerosene, strong disinfectants, or the proximity of the lighted end of a cigarette will make them loose their hold. Or they may be removed by the fingers with a twisting motion. In any case, they should be removed without crushing, for there are apparent cases of infection through the unbroken skin.

## II. ENDEMIC TYPHUS

This disease, originally described by Brill as a mild form of typhus fever occurring in summer in New York, has now been found of much wider distribution and to have its source in infected rodents. The two are indistinguishable serologically, and are differentiated clinically only by the relative severity of symptoms.

### EPIDEMIOLOGY OF EPIDEMIC TYPHUS AND ENDEMIC TYPHUS

The epidemiology of epidemic typhus and endemic typhus is quite different. In the first, man is the host of the infection; in the second, the rat.

The transmitting agent of epidemic typhus is the louse; while the flea functions in that capacity for endemic typhus. The rôle played by the flea in carrying the infection from rat to rat, and from rat to man, is different from that of the louse as a vector from man to man. Epidemic typhus is a disease of cold weather, attacks groups living under conditions of human misery and filth, and is readily disseminated by lousiness. Endemic typhus is a disease of the hot season, when lice tend to die out and are replaced by fleas. It attacks individuals, and manifests no tendency to spread from one person to another.

Endemic typhus has no relation to lousiness; usually occurs in persons having a close association with rats; and the virus has been recovered from fleas on rats trapped on premises where human cases have occurred. Fleas are readily infectible if allowed to feed on infected rats. Besides fleas, the rat louse is infectible; while it does not attack man, it may transmit the infection from

GRAPHIC REPRESENTATION OF MORTALITY RATES IN ELEVEN VACCINATED AND ELEVEN NOT-VACCINATED ADULTS IN THE BITTER ROOT VALLEY DURING FOUR-YEAR TEST PERIOD—1925 TO 1928 AND MORTALITY RATE IN EVERY ELEVEN NOT-VACCINATED ADULTS DURING THE TWELVE-YEAR PERIOD—1917 to 1928

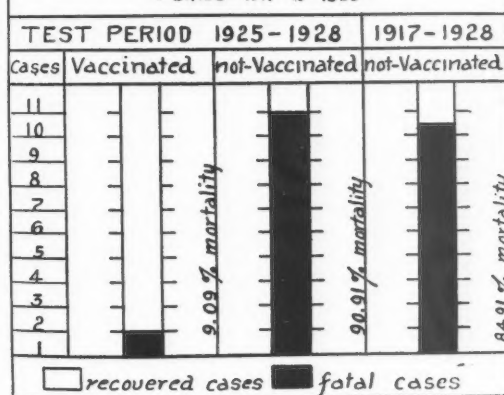


Fig. 12

rat to rat. The fleas that apparently transmit endemic typhus from rat to man are the same species that transmit bubonic plague. The virus has been shown to multiply enormously in at least one species of rat flea; is present in flea excreta, and may transmit the disease if such excreta are scratched into the skin.

Endemic typhus is strictly endemic and localized. It has been reported from various cities of the Atlantic and Gulf seaboard, and as far inland as Montgomery, Alabama. Cases occur in Baltimore from year to year, but not in Washington. Dyer states that he recovered typhus virus from Baltimore fleas on three separate occasions, but that all Washington fleas were negative.

#### CALIFORNIA STATISTICS

In California both forms of typhus have been reported since 1916. There were twenty-eight cases reported in 1916 and three in 1917. These were apparently louse-borne epidemic typhus; the infection being presumably imported by railroad section hands from Mexico, where epidemic typhus had been raging. Since that time, a total of sixty-five cases diagnosed as typhus have been reported for the State, distributed during thirteen years as follows: 1919, two; 1920, one; 1921, six; 1922, nine; 1923, sixteen; 1924, seventeen; 1926, three; 1928, two; 1929, one; 1930, one; 1931, two; 1932, one; 1933, four. All these latter cases are regarded as being of the endemic form, and no relation from one human case to another being traceable. There were no deaths in this latter series.

#### SYMPTOMS

The symptoms of endemic typhus closely resemble those of both epidemic typhus and Rocky Mountain spotted fever, but are less severe. The incubation period may vary from six to fourteen days. The onset is sudden, with chills, fever, headache, and prostration. The fever rises steadily, with morning remissions; reaches its maximum in three to six days; and may reach 104 to 105 degrees Fahrenheit. It terminates by lysis about the end of the second week, generally the fourteenth day. The pulse remains slow, even with high temperature. The rash usually appears on the fifth day, but may be delayed to the seventh day. It usually appears first on the chest and upper abdomen. In severer cases it is also present on the upper arm, shoulders and back; and may extend down the forearm, leaving the wrists and hands free. Occasional severe cases may involve the palms and soles. The eruption is one of macules having a diameter of two to three millimeters, and fading on pressure. Frontal headache may be severe. Mental disturbance of some sort is common—as confusion, mild delirium, insomnia, tremors, or photophobia. The white cell counts are usually within normal limits. Blood serum in nearly all cases contains agglutinins for *B. proteus* X/19 in 1:160 or more; with the highest titer being reached at about the end of the second week, perhaps 1:40,000. The case mortality is only about one per cent, and this practically limited to cases over fifty years of age. Re-

covery is complete. There is no specific treatment. The preventive measures against endemic typhus follow the same anti-rat procedures that are employed in bubonic plague.

Parnassus and Third Avenues.

#### DISCUSSION

HARLIN L. WYNN, M. D. (Chief, Bureau of Epidemiology, State Building, San Francisco).—Doctor Munson has presented a concise account of Rocky Mountain spotted fever and endemic typhus fever, and should be commended on bringing the two diseases again to our attention at this time. Both occur in California in the spring and summer. The typical case of Rocky Mountain spotted fever, in an individual who has been in a known tick-infected area and who gives a history of tick bite, presents little difficulty in diagnosis. However, physicians should be on guard for the extension of the disease to new areas of the State, as the distribution of the Dermacentor is not confined solely to the known infected areas.

Doctor Munson has called our attention to the possibility that cases resembling the so-called "Colorado tick fever" may occur in California, and I should like to emphasize this point. While it has not been conclusively proved that "Colorado tick fever" is a mild form of Rocky Mountain spotted fever, yet both occur in the same localities of Colorado and adjoining states, and both present the same epidemiologic picture. Some experimental work has been done in this State on a few cases suspected of being "Colorado tick fever," but as yet nothing definite has been determined.

That we have endemic typhus in California cannot be doubted. Most of the cases occur in the southern part of the State, and are mild in character. Five deaths occurred in sixty-five cases reported during the period from 1918 to 1933, inclusive. The seasonal distribution of the cases is not marked, being scattered throughout the year:

January	5
February	5
March	5
April	3
May	1
June	1
July	4
August	8
September	1
October	8
November	17
December	7
Total	65

There has been no tendency for the disease to spread from any one of these cases. No doubt mild cases may escape recognition entirely, unless the possibility of the disease is kept constantly in mind. A limited amount of research work has been carried on in an effort to determine the reservoir and vector in this State, but the results so far have been negative.

✱

W. H. KELLOGG, M. D. (State Hygiene Laboratory, Berkeley).—The question of the relationship of Rocky Mountain spotted fever to typhus is interesting because of the many resemblances between them. Organisms of the same type, the rickettsial bodies, are undoubtedly the cause in both diseases, although there are discrepancies between the degree of infectivity of tissues, and the number of rickettsial bodies visible that still remain unexplained. A curious fact regarding the virus of Rocky Mountain spotted fever is that it is more aggressive or invasive when in the tick than in the blood and tissues of mammals. This is shown by the more rapid and more certain effect of guinea-pig inoculation with tick virus than with mammalian. Other curious features are the wide fluctuations in virulence, depending on whether or not it has been "activated," so to speak, by a blood meal. Injection of the contents of an empty but infected tick results in no disease, but does result in immunity; whereas the contents of an engorged tick are highly

infective. Both spotted fever and typhus are characterized by the appearance of vascular lesions, which are exactly the same, and the symptoms are so much alike that clinical observation alone is insufficient to certainly establish a differential diagnosis, although it is true that in Rocky Mountain spotted fever there is a greater tendency to hemorrhage and gangrene. In inoculating guinea-pigs, scrotal lesions are produced by both diseases, although the difference in severity is one means of distinguishing. Finally, the Weil-Felix reaction is obtained in both diseases, indicating a very close relationship of the two viruses. The Weil-Felix reaction being, as it is, the agglutination of the proteus bacillus—an organism having no relationship to the disease—by the blood serum of a typhus or Rocky Mountain fever case is an immunologic mystery. The theory has been advanced that the strain used, proteus X19, is a noninfectious stage of the specific virus. This theory, however, is not generally accepted. The test is, fortunately, a thoroughly reliable one, and is successful in a much higher percentage of cases than is the Widal reaction in typhoid fever. Technicians using the test should be thoroughly familiar with the fact that the agglutinin present in the patient's blood is of the O type, and that the floccular type of reaction is not the important diagnostic sign it would be in diagnosing typhoid. It is possible, therefore, for one not familiar with the difference between the O and the H type of agglutination to make a misleading report. The complete and final separation between Rocky Mountain spotted fever and typhus is made by animal experiments in cross immunization, but clinical distinction is often capable of reasonably accurate conclusion by calling in the facts of the history, such as tick bites, the locality, whether rural or urban, and the season; early summer being the season for ticks, and the open country the place. Both flea-borne endemic typhus and the louse-borne epidemic typhus may occur at any season of the year, but the presence of lice or the proximity of rats are factors easily established.

## ANESTHESIA IN SURGERY OF THE CHEST\*

By DOROTHY A. WOOD, M. D.  
San Francisco

Discussion by Harold Brunn, M.D., San Francisco;  
Leo Eloesser, M. D., San Francisco; Edward H. Bolze,  
M.D., San Francisco.

AMONG the newer surgical specialties, surgery of the chest is coming into greater prominence, and consequently the problems of anesthesia for these operative procedures are confronting the anesthetist. Not all of the patients are suffering from pulmonary tuberculosis, but all have diseases of the lung which make it imperative that no ether be given. Many operations are performed under local anesthesia alone. When general anesthesia is used, nitrous oxid-oxygen is the anesthetic of choice in our experience. In many instances a combination of local and general anesthesia is used. The operative field is blocked off with novocain, and the local anesthesia is supplemented by nitrous oxid-oxygen for the more painful procedures, or, when the local anesthesia wears off or the patient becomes too fatigued. The amount of nitrous oxid-oxygen varies from a few whiffs at intervals, an obstetrical analgesia if you will, to a complete surgical anesthesia. The anesthetics have been given for different surgeons, and the

methods vary with the type of patient, the disease, the operation to be performed and the surgeon who is operating.

### PREOPERATIVE PREPARATION

The preoperative preparation of the patient is of particular importance when an attempt is made to operate with a minimum of inhalation anesthesia. We have used three different methods. In some instances we have given rather large doses of morphin and scopolamin in divided doses, one hour and one-half hour preceding the operation. This has worked very well for some patients, but at other times it has seemed to act as too great a respiratory depressant, and some of the patients have tended to be cyanotic even before the operation was commenced. Still other patients have been given one of the derivatives of barbituric acid hypodermically, about an hour preceding operation. Perhaps our dosage was not large enough, but it has seemed to us that the patients were not sufficiently narcotized. To yet another group of patients we have given avertin, which has proved to be extremely satisfactory. This is particularly good for those who are more nervous, for they can be put to sleep in their own rooms and are unconscious of the entire procedure, even of being taken to the surgery. We use a maximum of ninety milligrams of avertin, per kilogram of bodyweight, and frequently drop down to from sixty to eighty milligrams, and combine the avertin with local or with nitrous oxid-oxygen anesthesia. No untoward results have occurred. Avertin has no effect on lung tissue; it is not eliminated by the lungs, and, given in doses of ninety milligrams or less, does not affect the blood pressure to any great extent. The sleep is very natural; there is no increase in the respiratory rate, and every patient has been enthusiastic about it. This is the most humane method of all, for no matter how stable a person may be, extensive surgery of the lung is an ordeal, and the less a patient knows of his own operation the better. The exhaustion of major surgery under local anesthesia alone is not worth while, when a safe method such as avertin is available.

### POSITION OF PATIENT ON THE TABLE

The position of the patient on the operating table presents a very definite problem. When the operative field is placed in the most advantageous situation, the patient's head is often low. He must lie on his side over a pillow or sand bag; this compresses the lower or presumably good lung. The excursion of the affected lung is limited by the operative procedure. It is evident that every factor conducive to a good operative position is the worst possible for adequate aeration of the blood, and consequently the patients are often cyanotic before the operation is even started. To obviate this cyanosis, oxygen is given from the start and throughout the operation.

### TYPES OF CHEST OPERATIONS

Operations on the chest may be divided conveniently into two types: first, those in which the pleural cavity is not opened; and second, those in

\* Read before the Anesthesiology Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.



which it is. In the first group are the phrenicectomies and the thoracoplasties. The phrenicectomies offer no difficulty as to the position of the patient on the table. Novocain is the usual anesthetic agent; occasionally, however, a whiff of nitrous-oxid-oxygen is given when the nerve is evulsed. These are simple procedures and do not present any particular problem in anesthesia. In the thoracoplasties, portions of the ribs are removed so that the chest collapses and compresses the lung. Sometimes sections from all twelve ribs on one side are removed, usually in two stages, in order that cavities in the lung may be collapsed and the infection more readily cleared up. If the condition is localized at either the top or bottom of the lungs, it may be necessary to remove only portions of the upper or lower six ribs respectively. When the thoracoplasty is done on the lower ribs, local anesthesia is generally sufficient. In thoracoplasties of the upper ribs, nitrous oxid-oxygen is usually necessary before the operation is completed, especially when the first rib is removed. It is frequently desirable to remove all, or nearly all of this rib, and it is difficult to anesthetize this area completely with novocain. The patient's position on the table does not effect him profoundly, and it is only occasionally necessary to administer oxygen.

The second group of operations is comprised of those in which the pleural cavity is opened, as rib resection for drainage of pus or removal of cysts or tumors from the pleura, and operative procedures of the lung, such as lobectomy. In this type of operation, when the pleura is opened the lung immediately collapses and the respiratory embarrassment is often pronounced. For these operations it is wise to give oxygen from the outset, maintaining about ten millimeters of positive pressure, so that the upper lung is not entirely collapsed, nor inflated enough to be in the way of the surgical procedure. If the operation is being performed under local anesthesia, oxygen alone is used, so that the maximum amount of oxygenation of the blood may take place through the diminished lung area, and the patient's color be maintained without cyanosis. If, at any time, a respiratory stimulant is needed, carbon dioxid may be added, or, if the procedure becomes painful, nitrous oxid may be added to the oxygen. The pressure is measured accurately and kept at not more than ten millimeters by using a small pressure gauge which is fitted into the system, and which indicates the pressure of the gas from the bag of the gas machine to the patient. When the operation is finished, the pressure is elevated to twenty-five millimeters to aid in the obliteration of the pneumothorax, and the air in the chest cavity is allowed to escape under water through a tube led out from a stab wound in the lower part of the chest. The pressure gauge, however, is only a refinement of technique, for the normal gas pressure from the bag of the new, low pressure machines rarely exceeds ten millimeters, and the maximum pressure available is twenty-five millimeters.

#### COMMENT

On several occasions bronchoscopy has been done before surgery, and a tracheal catheter inserted so that tenacious sputum may be removed by suction and the oxygen may be given directly into the lung. In the usual case, however, this is unnecessary, for a mask applied to the patient's face is just as efficient in maintaining pressure in the lung. Moreover, if the bronchoscopy and operation are performed under local anesthesia, the double procedure becomes very long and tiring to the patient, and the cocaineization of the throat and larynx inhibits the cough reflex so that sputum may be re-aspirated, or may spill into the good or dependent lung, instead of being expectorated. For the same reason some clinicians are fearful of giving nitrous oxid to these patients, feeling that there may be more respiratory effort under general anesthesia and, with the cough reflex abolished, there may be a spill into the good lung. Avertin anesthesia is, therefore, to be desired, for there is no increase in respiratory rate or effort; if anything, the opposite is true, and the cough reflex is not abolished. The coughing may be a disadvantage to the surgeon, but after the accumulation in the throat is removed, a few whiffs of nitrous oxid can be given and the operation resumed.

Spinal anesthesia for lobectomies has been recommended. This is a rather dangerous procedure and, if used at all, must be handled with care and used only in selected cases. With a spinal anesthesia which extends to the upper part of the thorax, the respiratory excursions are markedly diminished; this is advantageous to the surgeon, but does not permit adequate aeration and oxygenation of the lungs and blood. It is, therefore, imperative that oxygen be given throughout.

During a lobectomy, one of several emergencies may arise. The heart may stop, perhaps as a result of a mediastinal shift which is brought about by the disturbed relations created by the open chest and the collapsed lung. If the wound is closed temporarily with a towel, the lung expanded with oxygen, and the patient turned onto his back, so that he may use the dependent lung, recovery is rapid. If air embolism occurs, it is usually fatal. A third complication is shock, which may be the result of the loss of blood, or may occur without hemorrhage. The operation is such a major procedure that, even though the patient may be in good condition at the close of the operation, all patients receive a transfusion of whole blood.

#### SUMMARY

1. The preoperative preparation of the patient is important. We have used three types of drugs in such preparation: morphin, in rather large, divided doses, barbiturates hypodermically, and avertin by rectum. The latter has given excellent results, and has won the approval of the patients receiving it.

2. The position of the patient on the table presents a definite problem for the adequate oxygenation of the blood.



3. The usual procedure is to block the operative field with novocain and supplement the local anesthesia with nitrous oxid-oxygen as needed—from a few whiffs to complete surgical anesthesia. In some instances, a tracheal catheter has been used to deliver the gas or oxygen, but this technique is not essential.

4. In open operations on the chest, oxygen ordinarily is given continuously with slight positive pressure. The pneumothorax may be obliterated partially by increasing the pressure at the close of the operation.

5. The use of spinal anesthesia presents definite dangers. If such anesthesia is used, oxygen *must* be given continuously throughout the operation.

6. Some form of anesthesia, during which the patient may be unconscious, either avertin or nitrous oxid-oxygen, is best for the major procedures. Extensive surgery of the lung is an ordeal, and the less one knows of his own operation the better. The exhaustion and shock of a long procedure under local anesthesia is not worth while when other safe methods are available.

1390 Seventh Avenue.

#### DISCUSSION

HAROLD BRUNN, M.D. (384 Post Street, San Francisco).—The problem of anesthesia in surgery of the chest is still unsolved. In a recent trip through the East I found that every clinic had its own method. It is interesting, for example, to know that Shenstone and James of Toronto do all their lobectomies with spinal anesthesia preferably. I have used spinal anesthesia on a few cases, but I have always been hesitant in employing this method of anesthesia, fearing the added shock and drop in blood pressure, both from the operation and the anesthesia. However, as in operations on the abdomen, the operation itself is made much easier, and were it not for the fear of drop in blood pressure, it is ideal.

As elsewhere, much depends upon the condition of the patient, and the anesthesia must be fitted to the patient and the type of operation that is to be done. Precautions must be taken all along the line, and for the best surgery one must have great confidence in the anesthetist, so as to be warned when danger signals arise. It is my own belief that deaths which have occurred, not infrequently, on the table during chest operations, and which have been frequently ascribed to the anesthetic, are really the result of air emboli. Air embolus can occur with very slight ruptures of the lung. With a lung full of pus, as in bronchiectasis or lung abscess, it is very possible that the secretion will by gravity enter the other lung, and if sufficient, may block it off, so that we must always by postural drainage, or even by bronchoscopy, empty the bronchus so far as possible before the anesthesia is started. Many times it is wise to cocaine the pharynx and leave a catheter in the trachea, so as to remove any fluid as it collects during the operation. Intratracheal anesthesia, when tumors are removed or on occasions when both sides of the pleura may be damaged, is invaluable. I believe that we cannot use any one type of anesthesia to the exclusion of others. Probably the preparation of the patient beforehand is of more value than the actual form of anesthesia, and this was exemplified on my eastern trip by the fact that no two clinics carry out the same anesthetic procedures. It would seem, therefore, that in every clinic that anesthetic is used with which the anesthetist in charge is most conversant, and so handles with the greatest of confidence.

LEO ELOESSER, M.D. (490 Post Street, San Francisco).—Doctor Wood's opinions carry great weight. Of the factors contributing to success in difficult operations in the chest cavity, choice of a proper anesthetic and, above all, of a skillful anesthetist, are often the most important.

Any prolonged inhalation anesthesia is dangerous for tuberculous patients, not so much on account of harm done to the pulmonary tissues by the anesthetic agent (for there is no reason to believe that  $N_2O$  and oxygen are harmful), but because the respiratory effort that the patient makes while being anesthetized is harmful. One guards a tuberculous patient carefully against exercise, yet the deep breathing of anesthesia is tantamount to that of a strenuous hill climb. Still I agree with Doctor Wood that a short, light gas anesthesia, supplementing really efficient novocainization, is preferable to local anesthesia alone for thoracoplasty or other extensive procedures. The shock, both mental and physical, is less. Avertin seems objectionable for patients with considerable expectoration, and with whom it is not desirable to abolish or to lower this cough reflex. They sleep too deeply and too long with avertin. It seems better to have patients half-awake than too deeply asleep.

Real difficulties of anesthesia arise when the chest is widely open, as in lobectomy, and when respiration is further encumbered by the patient's lying on the better side. In such operations coughing must be stopped; the sudden inflation and deflation of the lung that occur when the patient's cough puts a great strain on the heart and makes operations in the open chest extremely difficult. A considerable part, if not all of such operations, may be done under efficient local anesthesia, after proper preparation with morphin and large doses of the barbiturates. During certain phases of operation, such as work in the hilum, gas may be used. These intervals of gas anesthesia need ordinarily be but short—five or ten minutes or less—after which the gas may be discontinued. Injection of a few drops of a solution of cocaine with adrenalin, either with a hypodermic syringe through the wall of a large bronchus and into its lumen, or with a spray if the bronchus is open, will often stop a troublesome cough reflex.

The operator should plan his operation carefully, so as to waste as little time as possible, once the chest is open. There is no need for haste until the pleura is entered, but once the chest is wide open every minute counts.

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EDWARD H. BOLZE, M.D. (450 Sutter Street, San Francisco).—At the Mount Zion Hospital the anesthesia of choice in chest surgery has been a combination of local and nitrous oxid-oxygen, the operative field being blocked off concurrently with the administration of the gas. Obviously, the ideal anesthesia for this type of surgical procedure must necessarily be one which is under second-to-second control, particularly as regards optimum oxygenization, management of the cough reflex, and ease of respiratory movements. Local anesthesia alone has been used extensively, since it possesses the advantage of eliminating pulmonary irritation and assuring voluntary control of coughing and expectoration. The ill effects, particularly upon a nervous patient, of a long procedure under local anesthesia, have been stressed by Doctor Wood. In combining local and nitrous oxid-oxygen less of both agents is required, minimizing the objectionable features of both.

The combination of avertin and nitrous oxid-oxygen provides a good anesthesia. We have found that this is especially true in children, with whom it is a distinct advantage to carry them to the operating room asleep. If the pre-anesthetic narcotic is avoided, better control of the cough reflex is had. Where avertin has been used as a basal anesthetic agent, one can give nitrous oxid-oxygen with an excess of oxygen, minimizing the possibility of anoxemia.

## LOS ANGELES COUNTY MEDICAL ASSOCIATION—ITS NEW HOME\*

By STANLEY K. COCHEMS  
*Los Angeles*

THE story of the library and the permanent quarters buildings of the Los Angeles County Medical Association is the story of a well conceived plan working through a number of years toward a definite goal, which was reached on October 25, 1934, when the structures were thrown

members and friends, thronged the rooms and library on the evening of the housewarming.

### THE BEGINNING OF THE PERMANENT QUARTERS FUND

Fourteen years ago the idea of the value of a permanent quarters to the Association became a tangible thing when the Board of Trustees in 1920 authorized the building up of a permanent quarters fund. Members were asked to make voluntary pledges of \$100 or more. Two years later, in 1922, these voluntary pledges, representing



Fig. 1.—Photograph of the new home and headquarters of the Los Angeles County Medical Association, located at the northeast corner of Wilshire Boulevard and Westlake Avenue, Los Angeles. The entrance to the library is to the left, and the entrance to the administration and assembly rooms of the Association is to the right. The long windows show the location of the lounge-auditorium room.

open for the use of a membership in excess of two thousand.

That these buildings have been in the minds of the membership through the years was evidenced by the fact that more than thirty-five hundred,

650 members, or nearly 50 per cent of the then membership, totaled \$70,450. Because such a large percentage of the membership had pledged voluntarily, the Board of Trustees then voted to make the permanent quarters pledge mandatory for all new members, in fairness to those who had voluntarily pledged and paid.

\* CALIFORNIA AND WESTERN MEDICINE is indebted to Mr. Cochems, executive secretary of the Los Angeles County Medical Association, for this article.

See also editorial comments on page 410.



Fig. 2.—Showing the northwest corner of the lounge-auditorium.



Fig. 3.—North wall of lounge-auditorium, showing the stage. The St. Mihiel mural is to the left, and the King's College mural is to the right. At the opposite end of the room are murals of Rothenburg (Germany) and the Rathaus (Wien).

Excellent financial management by the Board of Trustees, Dr. Harlan Shoemaker, secretary-treasurer for the period 1919 to 1930, and Dr. Harry H. Wilson, secretary-treasurer for the period 1931 to 1934, built this permanent quarters fund to where it could conservatively be valued at \$300,000 in cash and income property and other real estate.

#### THE MAINTENANCE PROVISIONS

Possibly the most important feature in this story is the fact that these officers provided in their financing a fixed income to maintain these buildings. This was provided by the purchase of a valuable piece of property on the southeast corner of Wilshire Boulevard and Westlake Avenue. This property was leased for ninety-nine years, with a definite income of approximately \$12,000 a year. Later various real estate transactions saw the Los Angeles County Medical Association the owner of the valuable piece of property on the northeast corner of Wilshire and Westlake, upon which its completed buildings now stand.

#### INFLUENCE OF THE BARLOW MEDICAL LIBRARY COÖPERATION

The decision to build in 1934 is due largely to the magnificent offer of the Barlow Medical Library Association to give to the Los Angeles County Medical Association their very valuable collection of books and other medical literature, which in the past had been housed at 742 North

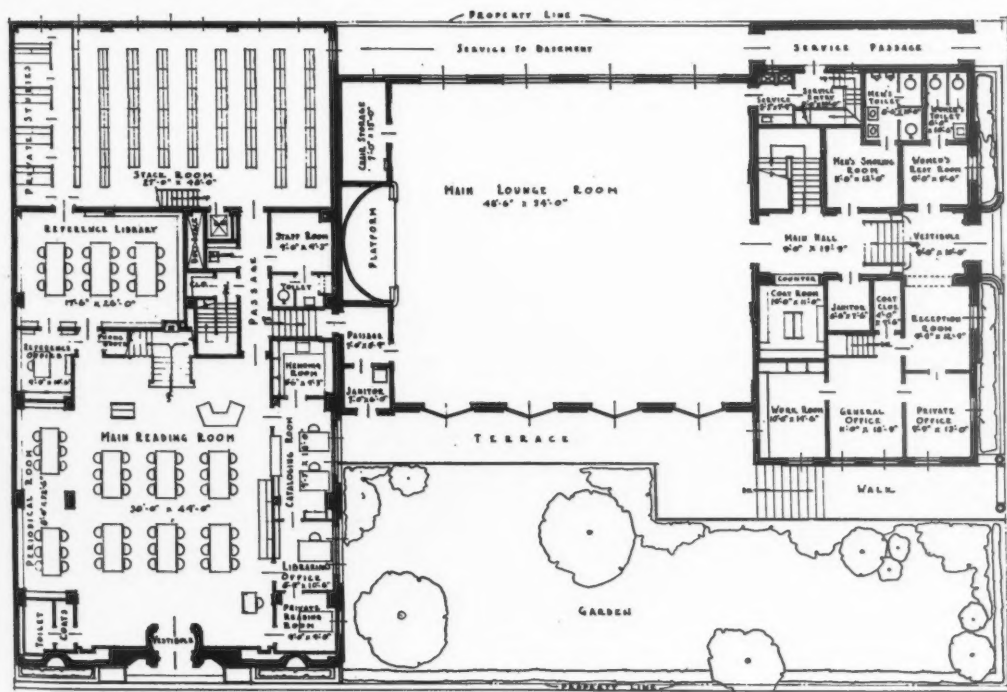


Fig. 4.—Showing one end of dining room, which has a seating capacity of 140 places.

Broadway. It was also felt by the Board of Trustees to be excellent business policy to build before the price of building materials increased, so advantage was taken of the market and contracts were signed.

#### OTHER COÖPERATIVE EFFORT

Splendid coöperation was very much in evidence during the building period—that is, coöperation of the Building Committee, the Board of Trustees, the officers, Gordon B. Kaufmann, architect, and the William Simpson Construction Company; and the spirit of coöperation evidenced by the membership-at-large in liquidating their



Floor plan drawings, courtesy of Architect Gordon B. Kaufmann.

Fig. 5.—First floor plan of the Library and Assembly Hall, Los Angeles County Medical Association.

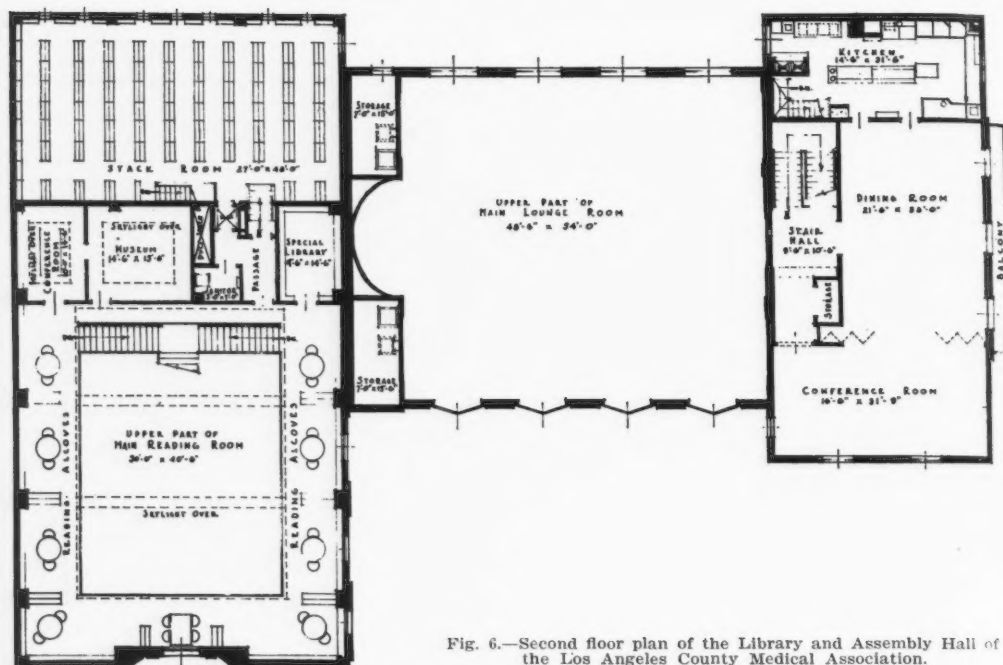


Fig. 6.—Second floor plan of the Library and Assembly Hall of the Los Angeles County Medical Association.

permanent quarters pledges. This spirit shown by the membership, giving evidence of a truer appreciation of the need of a cohesive organization, now represents one of the greatest assets that the Association has. It is the fulfillment of a hope, of a wish long cherished by all those interested in the welfare of organized medicine in Southern California.

#### DEDICATION OF THE BUILDINGS

The Association's new home became a tangible thing on October 25, 1934. Its buildings, which offer essential club privileges to the entire membership, mean far more to the membership than a bit of pride of ownership. They stand as a symbol of a unity of purpose, an expression of true fraternalism, and the spirit of true cooperation so vitally essential today for the protection of the highest of all professions.

What this building program of the Los Angeles County Medical Association will mean in the years to come to medicine in Los Angeles County and to the public health and welfare cannot be estimated. During the few short weeks that the membership has enjoyed a place to meet and to dine and a modern library with all modern conveniences, offering an incentive to study and research, a very marked spirit of fraternal understanding is apparent.

#### THE LIBRARY BUILDING

The buildings consist of a two-story, Class A library building, 50 by 100 feet, and a two-story assembly building, 60 by 100 feet. The main reading room of the library provides ample reading space for many years to come for a membership greatly enlarged, and with greater incentive to use the library. The library building contains a

reference library, private study rooms, and on the mezzanine floor a number of sections devoted to special literature. It has a room set apart for rare volumes. The stack room allows for four floors of stacks, setting the total volume capacity of the library at approximately ninety thousand. Mrs. Mary E. Irish, for years librarian for the Barlow Medical Library, is librarian.

#### THE ASSEMBLY OR HEADQUARTERS BUILDING

The assembly building consists of a lounge-auditorium, with two-story height ceiling. In the west wall there are four ceiling-height windows looking out on an exquisite bit of landscaping of Brazilian pepper trees, poplars, and shrubbery. During the day this large room, measuring some 50 by 55 feet, is essentially a club lounge where the members may relax during the noon hours. It is readily converted into a formal auditorium for general meetings of the Association or for the meetings of the larger groups that are a part of the Association. Provision is also made to convert it into a banquet room, where three hundred may dine. Its capacity as an auditorium is well over five hundred.

The first floor of the assembly building also includes the offices of the Association. The second floor over the offices consists of a dining room and a kitchen. The dining room can be divided into a large room and a smaller room, to accommodate two dinner groups at one time. A total of 140 can be accommodated in the complete dining room. Kitchen facilities are adequate to take care of more than five hundred, the kitchen being completely modern in every aspect.

The total cost of these buildings, completely furnished, amounts to approximately \$105,000.



## THE PURPOSE OF THE BUILDINGS

In the architect's original conception of these buildings and in his conferences with the Board of Trustees and the Building Committee, there was the thought to make these buildings representative of the membership in their design, in their decoration, and in their furnishings, rather than to follow some classical form; and it was in this that the coöperation mentioned before has resulted in the County Medical Association now having a library and a permanent quarters that leaves little room for criticism from any of the large membership of well over two thousand. The buildings are unique, they are modern, they are entirely different, yet no discordant note is struck. They answer the physical needs of the Association and they express that intangible something—the spirit of the Association.

1925 Wilshire Boulevard.

### THE BARLOW MEDICAL LIBRARY, AND ITS SUCCESSOR, THE LIBRARY OF THE LOS ANGELES COUNTY MEDICAL ASSOCIATION

By MARY E. IRISH  
Los Angeles

THE seed from which the Barlow Medical Library grew was sown in 1897. At that time the population of Los Angeles was about 86,000, and there were 303 physicians registered in Los Angeles County.

## THE FIRST MEDICAL LIBRARY IN LOS ANGELES

A medical school founded in 1886, as the "College of Medicine of the University of Southern California," had its buildings on the west side of Buena Vista Street, between Ord and Alpine streets, "only a few blocks," to quote from an early bulletin, "from the heart of the city." One of the college buildings was the Hendryx Laboratory, and in it a room had been set aside for a library.

The original sponsor of this medical school library was the late Dr. Stanley P. Black, professor of pathology in the institution, after whom the Stanley P. Black Memorial Lecture, now annually given in Pasadena, is named.

Dr. Wilbur A. Hendryx, who donated the money for the erection of the Hendryx Building, made the first gift toward the new library, a collection of about fifty volumes; and Dr. Milbank Johnson, in 1900, presented approximately 1,000 volumes of journals. The collection was known at the time as the "Hendryx Medical Reference Library," and Doctor Johnson was appointed librarian. All the early accessions were gifts from physicians who were either members of the faculty of the old College of Medicine, or friends of faculty members.

The history of the Library, from 1897 to 1906, is that of many libraries: a constant addition of



Fig. 1.—Entrance to the Library Building of the Los Angeles County Medical Association at 634 South Westlake. The cornerstone at the lower right hand pillar has inscribed upon it: "THIS STONE WAS SET BY WALTER JARVIS BARLOW, M. D., JUNE 21, MCMXXXIV."

books and journals, with a consequent need for more and more space in which to properly house them.

## THE BARLOW MEDICAL LIBRARY

This need was met, in 1906, by the erection of a library building by Dr. Walter Jarvis Barlow—a member of the faculty of the College of Medicine of the University of Southern California, and later its Dean—at 742 Buena Vista Street



Fig. 2.—North side of library, showing entrances to reference libraries and stack room. The Galen in the alcove is a Carrara marble, sculptured by Tullio Lombardi (1600), and presented to the Barlow library by Dr. W. Jarvis Barlow.



Fig. 3.—South side of the library, showing the west entrance from 634 Westlake Avenue.

(now North Broadway) and opposite the College. In that year, inspired by the prospect of a new building, forty-eight physicians pledged themselves, as patrons, to pay \$25 annually for the support of "the Medical Library built by Doctor Barlow." An association, named in the doctor's honor, was thus formed, and a constitution and by-laws adopted under which, with some amendments, the library has been conducted until this year, 1934, when it was taken over to become the central nucleus of the "Library of the Los Angeles County Medical Association."

The Barlow Medical Library plan provided for memberships of three kinds: patron, annual, and associate. Later on, life and honorary memberships were added. Membership entitled the holder to the privilege of borrowing books and journals. To the patrons went the responsibility of electing officers and trustees, who controlled the Library's policy. From the beginning, the library building was always open to physicians and students for reading and study, whether they were members of the Association or not.

An invitation to the opening of the new building, in 1907, was issued in the name of the Barlow Medical Library Association, to which were appended the names of the trustees, Dr. Milbank Johnson, president; Dr. Stanley R. Black, secretary; and Doctors George L. Cole, Fitch C. E. Mattison, B. F. Church, John R. Haynes, and W. A. Edwards, followed by a roll of forty-seven members, of whom three were women. On this list the following have continued membership until the present: Doctors W. Jarvis Barlow, George L. Cole, W. W. Beckett, F. M. Pottenger, Hill Hastings, Granville MacGowan, Joseph M. King, and Charles C. Browning, while twenty-one of the charter workers have passed on.

The opening and dedication of the Library took place on February 7, when Dr. William A. Edwards made the speech, still recalled, felicitating the profession and the city on the generous gift of Doctor Barlow.

On page one of the first guest registration book is the entry, "Library formally opened, February

7, 1907." The first signature is that of J. R. Renaker, of Lexington, Kentucky. Through the years, the names of many of the officers and members of the Los Angeles County Medical Association are to be found on the pages of this book. The name of Dr. George Dock is probably the one most often found, as he had the excellent habit of registering at each visit. On these pages are also to be found the names of many eminent men who have visited the library, the most distinguished among them, perhaps, being Dr. William H. Welch of Johns Hopkins, and a close friend of Doctor Black who never lost his active interest in the institution.

The Barlow Medical Library building is of fire and earthquake-proof construction, and classic in architectural form. The building itself was given to a non-profit holding corporation, which also held the title to the buildings of the medical school. In 1909, the faculty decided to transfer its property to the State University, and at that time the library building was deeded to the University of California.

In 1907, Dr. and Mrs. Barlow were in Washington and obtained from the Library of the Surgeon-General a large number of files of valuable medical journals. The report of the librarian, in 1908, showed 1,912 bound volumes of books and periodicals, and 2,000 volumes of unbound journals. Very large gifts of books have come from the Los Angeles Public Library, the Pasadena Medical Library, and the Alhambra Public Library, and also from a great many private individuals, including the families of physicians at whose death their libraries, instead of being broken up and scattered, were so donated.

As already stated, in 1909, the Barlow Medical Library building was deeded to the regents of the State University; but until October, 1934, the Library was housed in the building, and during all these years a portion of the librarian's salary was paid by the Los Angeles Medical Department of the University of California.

The Barlow Medical Library, therefore, may be looked upon as the embryo or nucleus of a large, fully-equipped and well-sustained library



Fig. 4.—The Barlow Medical Library Building at 742 North Broadway, Los Angeles.

of our present day. Convention in nomenclature gives the term "large library" only to institutions having more than 10,000 volumes; and it is interesting that the Barlow Medical Library has grown to belong to the "large library" group. The last report showed 18,119 volumes, exclusive of unbound periodicals and duplicates; and unbound volumes would bring the number well on to 30,000 volumes.

During the period of the existence of the Barlow Medical Library it was served by six presidents: Dr. Milbank Johnson, the late Dr. Stanley Black, the late Dr. Walter Lindley, Dr. William Duffield, the late Dr. T. C. Lyster, and Dr. George Dock. There have also been six librarians: Dr. Milbank Johnson, Miss Mary Williams, Miss Jessie Wier, Mrs. Katherine Ingham, Mrs. Ida D. Fellows and Mrs. Mary E. Irish. The Library's growth and excellent condition is very largely due, therefore, to the untiring interest and energy of these faithful officers who have balked at nothing, if it seemed necessary for the welfare of their trust.

#### SOURCES OF SUPPORT OF THE BARLOW LIBRARY

The library has received support from many sources. First, by dues of members, many of



Fig. 5.—The original library room in the Hendryx Laboratory Building.

whom belonged to the Los Angeles County Medical Association, the Los Angeles Department of the University of California, and the Los Angeles and California Medical Associations. Sections of the Los Angeles County Medical Association also aided in the upbuilding of departmental collections, through subscriptions and purchases of books and magazines, and the payment for binding or by direct money contributions. In addition to such aid there have been, as mentioned, many gifts of money, books and periodicals from interested individuals.

#### TRANSFER OF BARLOW LIBRARY TO LOS ANGELES COUNTY MEDICAL ASSOCIATION

On November 7, 1932, the Board of Trustees of the Barlow Medical Library Association presented resolutions to the Board of Trustees of the Los Angeles County Medical Association submitting a plan for transferring the Barlow Library to the County Medical Association. The

membership of the Board of Trustees at that time included the following physicians: Dr. George Dock, president; Dr. A. Elmer Belt, vice-president; Dr. H. E. Schiffbauer, secretary-treasurer; Dr. W. Jarvis Barlow, Dr. George H. Kress, Dr. Merrill Hollingsworth, Dr. T. C. Lyster, Dr. William Duffield, Dr. Carl Rand, Dr. C. C. Browning, Dr. Joseph M. King, Dr. W. W. Beckett, Dr. R. G. Taylor, Dr. Harlan Shoemaker, Dr. Donald Frick, and Dr. Carl Howson.



Fig. 6.—Dr. W. Jarvis Barlow, whose donation of the Barlow Medical Library Building laid the foundation for the collection that is now the library of the Los Angeles County Medical Association.

The resolutions adopted by the Board are as follows:

"Resolved, That the Barlow Medical Library Association, acting by and through its Board of Trustees, hereby tenders as a gift to the said Los Angeles County Medical Association all the books, periodicals, literature, stacks, bookcases, files, and all the personal property of the said Barlow Medical Library Association, provided that the said Los Angeles County Medical Association shall agree to keep and perform the hereinafter stated terms and conditions. Upon written acceptance by said Los Angeles County Medical Association of such gift, upon said terms and conditions, and upon provision by said Los Angeles County Medical Association of fit and adequate quarters for said Library, and upon its being in a position to take over the maintenance of said Library, the officers of this Association are authorized and directed to deliver to the Los Angeles County Medical Association all the above described personal property; . . . and be it further

"Resolved, That this offer of gift of said Library upon the terms and conditions aforesaid may be withdrawn by this Association by resolution of its Board of Trustees, unless the Los Angeles County Medical Association shall on or before January 1, 1935, accept this offer in writing, and shall, on or before said date, be in a position to take and maintain said Library in fit and adequate quarters."

#### THE LIBRARY BUILDING OF THE LOS ANGELES COUNTY MEDICAL ASSOCIATION

Following this act by the Barlow Library Trustees, steps were immediately taken by the Los Angeles County Medical Association to accept the proffered gift; and with just pride it has accomplished this two and one-half months prior to the limit of the stated period, so that the books are now all housed in the beautiful library building at 634 South Westlake Avenue. The reading rooms are most attractive, and every provision for quiet



study has been well planned. The bibliography stack and table give ample space for research of the literature. New books are on display in the main reading room; rare books in their own particular niche; special sciences are grouped most conveniently for use on the mezzanine floor, while other late and standard volumes are placed in the reference room. About 250 current periodicals are displayed in an alcove off the main reading room, thereby providing six months' files within easy reach.

#### VALUE OF MEDICAL PERIODICALS

The medical periodicals form the essential part of the Library, for they contain the fundamental contributions to medical literature. Included also are the most useful textbooks, systems of medicine, encyclopedias, and works on medical biography and bibliography. Through these means, the Library seeks to meet the needs of all classes of medical readers, from all who wish to keep up with the rapid advance of medical knowledge in general, to those who desire to make an exhaustive study of some special subject.

Members of the Special Libraries Association of Southern California, as well as physicians, whether residents of Los Angeles County or visiting, it is hardly necessary to state, are welcome to bring and seek to solve here all their medical problems.

#### THE FUNCTION OF A MEDICAL LIBRARY

A medical library is of service to its patrons in several ways. It helps keep the busy physician in touch with new discoveries in the healing science; it assists him in diagnosis and treatment; it aids in finding precedents in medico-legal cases; and it helps both in preparing medical papers and in making for such, correct bibliographies. No doctor can subscribe to all the medical journals; but a good medical library, if he will but use it, gives him the opportunity to read a great many periodicals and so to keep up with new discoveries wherever and whenever they are made.

Since the great value of a medical library lies in its journal files, the librarian is constantly trying to complete old files and to subscribe for the best of the new journals. It is always a difficult task to complete old files; but through membership in the Medical Library Association, with its exchange lists, this is gradually being accomplished, and many out-of-print journals are received that are unobtainable through other channels.

A medical library is especially necessary at the present day. Science and scientific research have made rapid strides since the inception of the library in 1907, and the records of these discoveries are all to be found in the Association's collections, as the first news of such scientific revelations and accomplishments comes through the pages of medical journals. It is the policy of this, the Library of the Los Angeles County Medical Association, as it was of the Barlow Medical Library Association, to index all journals as soon as they arrive, in order that physicians may know immediately about discoveries and their significance.

Special attention is also given to collecting works on medical topics concerning California and the Southwest, and to all material bearing on medical progress, or referring to or by medical men and women in this western area. Contributions to these topics, as well as to other lines of study appropriate to the Library, are suggested to those in a position to further the advancement of medical history and education.

At the time the gift of the Barlow Medical Library was made to the Los Angeles County Medical Association, the officers of the Barlow Medical Library Association were: Dr. George Dock, president; Dr. A. Elmer Belt, vice-president; Dr. H. E. Schiffbauer, secretary-treasurer. The Council of the Los Angeles County Medical Association has selected these same officers as the Administrative Committee of the Library under its new ownership.

From 303 physicians in Los Angeles County in 1897, to 3,918 physicians and surgeons in the County in 1934, according to the medical directory, among a population in the City of Los Angeles of 1,282,929, the need of still larger medical library facilities is very evident. Now, however, with this increase already made and the developed Barlow Library the property of the Los Angeles County Medical Association, supported by its entire membership and its various Sections, by unaffiliated physicians of Southern California, by the medical societies and groups, hospitals, universities and medical schools, the Library of the Los Angeles County Medical Association will rapidly take its place in the foremost ranks of American medical libraries, and will so splendidly fulfill the purpose for which it was once dedicated, and for which it has been rededicated November 27, 1934; to afford a place for broad and intelligent research to physicians of Los Angeles County and of the Great Southwest.

634 South Westlake Avenue.

#### POSTURE IN EARLY CHILDHOOD\*

By C. L. LOWMAN, M. D.  
Los Angeles

DISCUSSION by A. J. Scott, M. D., Los Angeles; Clifford Sweet, M. D., Oakland; Rodney F. Atsatt, M. D., Santa Barbara.

**P**OSTURE in childhood, implying a consideration of the skeletal alignment, or so-called body mechanics, along with bone diseases and deformities, should be of common interest to the pediatricist as well as to the orthopedist. Who, more than the child's physician, should be alert to potential conditions which may produce disabilities later in life?

If I can stimulate in you the same resolve to prevent future disabilities of the muscles, joints, and nervous system, that you have already shown in cases of asthenic and pretubercular children, I shall feel amply repaid for my efforts.

\*Read before the Pediatric Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.



## STRUCTURAL ALIGNMENT AND HEREDITY

There are authorities on this subject, or shall I say, writers, who say that faults in structural alignment are hereditary, and that variables from a certain median are normal within a considerable range. They insist that no amount of exercise or treatment can prevent or modify the ultimate posture which the individual will develop. This, I am sure, is contrary to the experience of those of you who, by training or interest, have observed the corrective efforts of some orthopedist and his technical assistants.

Direct contact in school work, also, will have shown you benefits accruing from the work of physical educational departments, especially in centers where corrective work is given to children with postural faults.

Critics say that our opinions are derived from the consideration of abnormal or pathological clinical material; but our experience at the Orthopedic Hospital, in Los Angeles, where more than the usual amount of attention is paid to postural deviations, proves that we deal with the same set of faults in the same groups of children that are found in the schools. In fact, most of these postural patients are referred to us by school physicians, health nurses, and physical directors from districts where no school corrective departments exist.

## IMPORTANCE OF REMEDIAL ATTENTION DURING CHILDHOOD

We all know that it is a common experience of daily practice with adults to find functional disturbances, and even pathological conditions, which, we must admit, would not have developed had the factors underlying them received remedial attention during childhood. When we relieve an adult of low-back pain, sciatic neuritis or so-called sacro-iliac strain, often very chronic in nature, simply by raising the heel of the shoe on the side of the short leg, or tilting the heels to correct faulty leg rotation, it is logical to presume that these conditions would not have developed had the underlying conditions been recognized in childhood and corrected.

For example, if a girl child is allowed to complete her childhood and come into maturity without proper physical measurements being made to establish the fact that she has a tilted pelvis secondary to maldevelopment, from habitual sitting on one foot, as well as having a short leg, unilateral flat-foot or coxa vara on one side, is it surprising that we are confronted with birth injuries from distorted pelvis, painful low backs at the menses, spinal curvatures with neuritis in shoulder girdles, head-tilts with maldevelopment of the face and jaws, and unlevel eyes?

It is distressing to the orthopedist to receive a continuous stream of young patients with deformities and disabilities, a large portion of which could have been prevented. Many of these cases have been in the hands of reputable pediatricists, and we find it embarrassing to have to make excuses and attempt plausible explanation to the patient's question, "Why didn't Dr. So-and-So recognize this condition? He has cared for our child since she was a baby."

## REPORT OF CASE

Let me cite a recent specific case.

F., a child ten years.

Complaint: Pain in her foot, near the heel. Was previously seen by another orthopedic surgeon, who diagnosed apophysitis after examination of the feet (he did not make a complete postural examination) and ordered her to keep off her feet for several months. This was done: the child used crutches for some time, but pain came back on return to weight bearing.

Observation showed us a stout child, obese for her age, with a stout mother and two sisters, both with endocrine dysfunctions. Examination showed the following postural faults: a short leg of one-half inch, knock knees, pronated ankles and second-degree flat-foot, scoliosis, secondary to the pelvic tilt, uneven shoulders, and faulty head position in both planes.

The foot symptoms were explained by the overweight put on a skeleton which had always been inadequate to the load placed upon it. The child's physiological age had never been on a par with her chronological age; hence the ligamentous and muscular strain in the feet.

The mother stated that she wanted only the child's feet examined, but was informed that we always make all-over examinations of all children. We adhere to this rule regardless of fee, even when perfectly obvious explanations of the symptoms are offered.

After explaining that the foot condition was only a part of the whole postural picture, we made the complete examination. When we discovered the conditions related above, the mother expressed herself as delighted with the thoroughness of our examination, and readily acquiesced in the further expense of a pelvic and spinal x-ray.

Following a custom established for twenty years or more in our office and clinic, an x-ray in the standing position was made. True to our prediction to the mother, we demonstrated the fairly well-advanced spinal curvature, the pelvic tilt, showing the crest of one ilium about a half-inch above the other, with distortion of the birth canal and increased anteroposterior tilt of the sacrum beginning, and resulting in the hollow back deviation.

This child, with corrective shoeing, foot-strapping, and exercises, obtained complete relief of foot symptoms within six weeks, and in the same time made marked correction of general alignment. Whether or not we will succeed in correcting the distortion of the pelvis, time alone will tell.

## COMMENT

But what could I say to the mother's question why had not the doctor who had always cared for her child discovered these faults earlier? I had to admit that if the endocrine obesity had been recognized from obvious type and family characteristics, and had been properly treated, the knock-knees and foot condition would probably have been prevented, or at least greatly minimized. I could only make lame excuses to explain why the leg lengths had not been measured and a plumb line used to establish pelvic and spinal malalignment, so that these deviations could have been checked in their incipency.

I have chosen to cite this one case, but assure you that it is not a lone, isolated case, but only an example chosen from the daily grist of office and clinic practice. For that reason I am moved to urge you to center your attention on details which entail such far-reaching results in the future lives of the children who pass through your hands.

Some orthopedists have been criticized for giving medical treatment to youngsters brought to them for remedy of static and postural faults. As

body engineers, I feel that we are justified in doing this, provided that we go no further than prescribing for actual conditions directly involved. In cases that are already under the care of a physician, we telephone or write to the doctor in question, giving him the opportunity to cooperate and carry on with the medical prescribing.

#### BODY POSTURE SHOULD BE CONSIDERED IN ROUTINE PHYSICAL EXAMINATION

I suggest that your routine physical examinations include not only the usual heart and lung, nose and throat and nutritional considerations, but a careful inspection of the child's completely nude body, in the sitting, standing and lying positions. Put your thumbs on the two posterior spines of the ilium, and then on the two anterior spines, and unless they are both absolutely level, use a tape measure as follows, with the patient standing (the patient just referred to showed the following measurements):

Posterior superior spine to the ground, right and left, Right, 32, Left,  $31\frac{3}{4}$ .

Top of mid-point of iliac crest to the ground. Right,  $34\frac{1}{4}$ , Left,  $33\frac{3}{4}$ .

Anterior superior spine to the internal malleolus; then to ground, right and left. Right,  $29\frac{1}{4}$ ; left,  $28\frac{3}{4}$ . Right  $31\frac{3}{8}$ ; left, 31.

If measurements differ, then figure out whether you have

1. A simple lateral tilt;
2. Simple torsion of the pelvis; or
3. A combination of tilt and twist.

Sitting, thumbs on posterior superior spines will show tilt. Same over crest, or actual measurement, crest to table. Then in front, thumbs on anterior superior spines will confirm the tilt or unmask a twist.

The measurement in one position may seem equal and O. K., but in one or both of the other positions they may not be.

Another case, a girl, age eleven, shows these discrepancies. Her measurements are as follows:

Anterior superior spine to internal malleolus. Right, 31.75. Left, 32 plus.

Anterior superior spine to ground. Right, 34 minus. Left, 34.75.

Crest to ground. Right, 39. Left, 38.

Posterior superior spine to ground. Right, 35.75. Left, 35.25.

You will note here that the left anterior superior spine distance from the ground is three-fourths of an inch plus, higher than the corresponding posterior superior spine, which is one-half inch lower than its opposite. This discrepancy could not be noted from measurement of anterior spine to internal malleolus, lying, which is what is usually taken. The fact that there is about the same difference in the measurements, both including and excluding the feet, shows that unilateral arch depression is not the causative factor.

#### IN CONCLUSION

In conclusion, these measurements, taken with the plumb-line readings—anterior, posterior, and lateral—will show up the structural faults sufficiently so that you can suggest treatment or refer the case for further orthopedic consultation.

If every pediatricist would check the statics of his child patients at least once a year, making the parents realize that such examination is good preventive medicine and excellent insurance against the development of future trouble, I am sure that both physicians and patients would be benefited.

523 West Sixth Street.

#### DISCUSSION

A. J. SCOTT, M.D. (1401 South Hope Street, Los Angeles).—Doctor Lowman has brought out a very important subject in pediatrics which I think is too often overlooked, or more likely neglected. One of the first admonitions we give the students in our annual lectures is to "strip the child." This gets to be a sort of joke with classes, but we tell them that is the first and most important thing in pediatrics after the history.

If the child is stripped and allowed to stand with a good light striking the body, and a careful inspection made of the general structure of the child, there is no need to overlook the important things that Doctor Lowman has emphasized. Perhaps we may not know what to do after we discover the defects, but the important thing to know is what is normal. We can refer to the proper consultant if we do not know what to do when we find slight deviations.

So often we see the typical fatigue posture Doctor Lowman mentions which makes the mother tell the child "to stand up straight," etc., and the corrective gymnasium teacher advises corrective exercises. On careful inquiry, we usually find that not corrective exercises are needed, but rest and plenty of it. We have in these children rapidly growing structures, which are soft and easily influenced by weights or postures. These structures do better when they are allowed plenty of rest to develop thoroughly, and then they develop strongly. Exercise can come later, when the tissues are firmer.

Too many children have too many activities thrust upon them by ambitious mothers. Inquire carefully into the question of dancing classes, music lessons and practicing, hours of retiring and midday rest; the type of mattress and whether or not pillows are used; whether reading is done after going to bed. All these things have a bearing upon this question of fatigue, and this in turn upon the posture. As was stated by the essayist, the heavy child with relatively delicate understructures, which are only growing tissues, is easily subject to strain and pressure, then deformity.

Hence, strip the child and insist upon sufficient rest.

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CLIFFORD SWEET, M.D. (242 Moss Avenue, Oakland).—I wish more physicians had Doctor Lowman's enthusiasm, energy and skill, especially in their contacts with children, who, being in the formative period of life, can be carried far toward an ideal state of health.

In our attempts to improve the physical make-up of children we must, it is true, often contend with one or all of the following difficulties: (1) Undesirable hereditary qualities or congenital defects. (2) The results of a faulty nutritional regimen at some period of life. (3) The damages, resulting from disease, through improper postural treatment during acute illness, and from lack of protection for weakened muscles during a prolonged convalescence. (4) The general human laziness, indifference, and lack of education which permit bad habits of body balance and mechanics to become chronic and progressive. We, as physicians, can defeat or greatly modify all of these if we do not permit an attitude of "Oh, what's the use?" to have a dwelling place in our minds until the formidable giants—Indifference, Doubt and, finally, Despair, have added their great strength to that of the enemy.

Every child should have frequent physical examinations, and no physical examination is complete without careful attention being given to the mechanical state of every part of the body, as is so clearly empha-

sized in the paper. When physicians generally carry out such examinations, many persons will be spared years of physical discomfort and debilitating nervous strain. I am certain there will then be less and less prescribing of such devices as arch supports and corrective shoes by shoe clerks, quite as often with detrimental as with beneficial results.

The more difficult corrective problems must be referred to the orthopedic expert, but every pediatrician can give intelligent attention to the child's bed, to the manner in which he stands, sits and walks, and to the clothing (especially the socks and shoes) which he wears. A firm flat bed maintains balanced body muscles during sleep. Correct habits of standing, walking, and sitting can be taught by the same methods which produce a serviceable working knowledge of arithmetic. The child who sits on a chair or school seat that is too high or too deep has his shoulder girdle pulled forward by the unsupported weight of his legs. Shoes and socks that are badly fitted force the child into habits of standing and walking that unbalance the entire system of skeletal muscles.

The well thought-out, practical measurements outlined in the paper will detect deviations from the best obtainable state of body mechanics. Further study will reveal whether heredity or congenital defects must be treated, or whether environment alone must be changed. The purpose of environmental control is to make the best possible use of the human material, which it is our great privilege to care for and mould toward perfection.

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RODNEY F. ATSATT, M. D. (1421 State Street, Santa Barbara).—The importance of having the pediatrician think of the posture mechanics of his small patient cannot too strongly be emphasized. All orthopedic men are continually faced with and chagrined by children with bad structural postures from scoliosis, and by what is even more lamentable, bad functional postures. I say chagrined, because many scolioses are caused by easily remediable short legs or asymmetrical pelvis, and most functionally poor postures are the results of faulty habits and neglected muscle tone.

Children are the most plastic material we have to work with. A sympathetic and understanding doctor, and an efficient and wide-awake physical therapist can so enlist the interest of the child that even early in life corrective exercises may be given and enjoyed, to the extent that complete coöperation is possible in the abolishment of a prominent abdomen and marked lordosis—the signs of bad habits and poor muscle tone.

Similarly a few simple measurements, coupled with a truly comprehensive inspection of the back which actually sees and recognizes a scoliosis, will often make possible an immediate correction of the scoliosis by means of a simple heel lift to equalize the distortion in legs or pelvis.

## BIRTHMARKS\*

### OBSERVATIONS ON TREATMENT

By CHARLES R. CASKEY, M. D.  
Los Angeles

DISCUSSION by L. R. Taussig, M. D., San Francisco; H. O. Bames, M. D., Los Angeles; Moses Scholtz, M. D., Los Angeles.

IN this short article only the commoner types of nevi can be discussed. These will include some vascular and nonvascular types. The simpler type of vascular nevi is the port wine mark, or nevus flammeus. This is the smooth, non-elevated mark of red or purplish color. It may or may not

fade upon pressure. Those that do not fade on pressure are the more difficult to treat. In many instances the nevus flammeus is the least satisfactory to treat, as far as cosmetic results are concerned; for so often it is this type of mark that occurs on the face.

### PORT WINE NEVI

There are various ways of treating port wine nevi, the object of all being a sclerosis of the blood vessels. Carbon dioxide snow for small lesions is sometimes quite satisfactory, but in large nevi not fading on pressure repeated blistering doses are required, which may in the end produce a white atrophic appearance. Some improvement can be effected with electrolysis and the dessication current, but the results are a mottling of the skin. I have tried sodium morrhuate intradermally and subdermally without, however, producing satisfactory results. The water-cooled ultraviolet light, in my hands, has not brought about as good results as has been claimed by some. I have not used the air-cooled ultraviolet for this purpose, as advocated by Andrews and others. Over large areas it is best to use a ball or cylinder-shaped piece of snow, employing a rolling motion over the same area repeatedly, without much pressure for several seconds, until the desired reaction is produced. This will not produce a sharply outlined reaction; but with proper management it will effect a fading reaction into the borders. This is desirable in treating large port wine marks. I have had little experience in treating this kind of birthmark with radium. I do not feel that the margin between good cosmetic results and later sequelae is great enough to justify the use of this remedy for the average nevus flammeus.

### NEVUS VASCULOSUS

The strawberry mark, or nevus vasculosus, is red to purple in color and elevated above the surface of the skin. They are most often irregular in shape and have a berry or lobulated appearance. This type of birthmark is not so difficult to eradicate, in many instances, if favorably located and it is not complicated with cavernous extensions. Carbon dioxide snow or electrodessication can be used where cosmetic results are not so important. Repeated, gentle treatments are better than severe ones, which leave the skin thin and atrophic. Very good results with beta rays of radium in suberythema doses will sometimes give good effects. Radium treatments should be cautiously repeated. Better results may be obtained by waiting, especially if improvement is evident. A mother will usually coöperate in this respect, if you will tell her at the first visit that it will take time to treat the case. The combination of carbon dioxide snow and radium in these cases should, if used at all, be employed with double caution.

### CAVERNOUS ANGIOMATA

In the cavernous angiomata, the deep vessels, especially the veins, are involved. The overlying skin may be almost normal, but it is not infrequently the site of a strawberry mark. These marks may occur on any part of the body, but

\* Read before the Dermatology and Syphilology Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.



those most difficult to treat are found on the face. Carbon dioxide snow may flatten the overlying strawberry mark; but if used too strenuously, it may so damage the surface of the skin that the proper treatment of the deeper lesion is hindered. The gamma rays of radium are the best agent with which to attack the deeper lesion with least likelihood of injury to the surface of the skin. The great temptation is to give treatments too often, for, as a rule, these nevi will continue to grow somewhat before the sclerosing effect of radium takes place. Quicker results must not be sacrificed for final cosmetic effect, for future sequellae may cause more grief than the nevus itself. If treatments must be frequent, they should be in such fractional dosage that marked atrophy of the skin is avoided. It is not much credit to radium or the operator to flatten a cavernous angioma, and later have atrophy and telangiectasia staring you in the face. More recently it has been suggested that some of the sclerosing solutions used in treating varicose veins might be used to sclerose the blood sinuses in this type of birthmark. So far only one of my cases with cavernous nevus has been so located that I could use this method. This nevus is on the back. I am using quinine hydrochloride and urethane. This case is too recent to report at this time. I have not had the temerity to use sclerosing injections about the face of a child, after having seen several cases of very painful and long-continued dermatitis and ulceration from injections of varicose veins. I am unwilling to try this form of treatment except in very favorably located cavernous nevi. The slower and safer treatment with radium is preferable until a more successful solution and technique are perfected.

#### SPIDER NEVUS

Nevus araneus, or spider nevus, is a superficial vascular nevus, the center of which often shows a vascular punctum from which the smaller vessels radiate. These small nevi can be destroyed by trichloroacetic acid, carbon dioxide snow, electrolysis, electrodesiccation, or the tip of a very fine cautery. The acid, though not painful, is likely to leave a small scar. Carbon dioxide snow trimmed down to a pencil point is useful in some cases, but the action is likely to cover more tissue than intended and produce scarring or depigmentation. Electrolysis is a good method, but it is not so well borne in children in whom we see most of the nevi of this kind. I think the best method in most instances is the electrodesiccation needle. A sewing needle should be used, and a very fine spark turned on momentarily after the center is entered. For the radiating vessels superficial surface sparking is usually sufficient.

#### LYMPHANGIOMA CIRCUMSCRIPTUM

Lymphangioma circumscriptum is a form of nevus characterized by deep-seated vesicles due to a dilated and cystic condition of the lymphatic vessels. They are usually yellow or straw colored. Sometimes the surface is verrucous. Cures have been reported in these cases by radiation, but I have not found them radiosensitive. Sometime

ago I observed the case of a boy with this type of nevus on the scrotum, pubis and thigh. X-ray had been used a few years before. X-ray telangiectasia and atrophy were present, and also the nevus. Radiation had been used without any protection to the testicle, which was atrophic. Clearly, the wrong modality had been used. The lesions were greatly improved with electrodesiccation. Carbon dioxide snow, electrolysis, or excision, are methods which may be used in some cases depending upon their size and location.

#### MOLES

The more frequently encountered nonvascular nevi are the moles. These may be flat and hairy or nonhairy, or they may be raised and either hairy or nonhairy. Flat, nonhairy, pigmented lesions can be greatly improved by treatment with carbon dioxide snow or the electrodesiccation needle. Superficial treatments over a period of time give better cosmetic results with either method. In some cases better cosmetic results can be obtained by surgical excision. It is not necessary to remove any more tissue this way than with the cutting current, and the advantage is that the wound can be sutured and so have only a narrow linear scar, instead of a broad, ugly one, I think that the fear that these nevi will become malignant is overemphasized. Hairy moles seldom become malignant. The black or dark brown ones seldom do, unless they are stimulated by irritation or improper treatment. Sometime ago I saw a large mole on the face which was showing definite signs of malignancy due to radium treatment. Radiation has no place in the treatment of pigmented nevi.

Hairy moles, either flat or raised, should first have the hairs removed by electrolysis before other methods are used, unless the hairs are very fine and numerous. Snow or electrodesiccation, in dosage sufficient to improve the nevus, will not destroy large hairs, but will render the skin sclerotic so that electrolysis is almost impossible if attempted later.

#### TIME REQUIRED AND RESULTS TO BE EXPECTED FROM TREATMENT

The most favorable time to treat nevi, particularly the vascular type, is soon after birth. Young cells are more easily affected than older cells. Recent marks are more responsive to carbon dioxide snow and to radium. Many marks have a tendency to grow as time goes on. The larger and older the lesion becomes, the poorer will be the cosmetic result. Treatment is more easily applied the first months of life, and there is also then less sensitiveness to pain.

Of the vascular nevi, the strawberry mark is more responsive to treatment. A few weeks to a few months is sometimes all the time needed for their treatment. The cavernous type of nevi require a longer period of treatment and observation. To get the most desirable results with radium, the treatment had best be carried out over a long period of time. Some of these lesions require two

to five years to get satisfactory results. At first the child should be observed every few weeks, while later observations can be from one or more months apart. The treatment with radium should be kept below erythema doses, and treatment deferred if there is continued improvement on observation. This sometimes requires judgment and persuasive tactics to keep the parents and friends satisfied and hopeful.

Port wine marks are not so likely to grow after birth and there is less urgency to begin their treatment early. The same is true of pigmented hairy and nonhairy birthmarks. However, in many instances, if these marks are treated early in life, there are more regenerative processes brought to play to repair destructive methods necessary for their cure.

As to what should be expected as fair cosmetic results will depend upon the type, size, and location of the birthmark under treatment. This should be discussed at the first visit and repeated from time to time, for parents are likely to expect too much as a final cosmetic result. They should be informed that abnormal skin is not replaced with normal skin, and all that can be hoped for is a pale smooth scar in vascular nevi, and a depigmented area for the pigmented types of nevi. Plastic surgery may be a great aid in getting good cosmetic results. This should be kept in mind, and radiation or other treatment used accordingly.

#### EQUIPMENT NECESSARY AND BEST SUITED FOR TREATMENT OF NEVI

Carbon dioxide snow, commercially supplied in tanks, is to be preferred to "dry ice." I have tried the latter several times when my tank became empty, but found the reaction too harsh.

A high frequency machine, with a finely adjustable spark gap, should be selected. The current best suited and less painful for skin work is one which will turn the skin white rather than black when the needle is applied. Many physicians get poor results in treating skin lesions with their machines and never know the reason. I rarely ever use other than the Oudin current. Where destruction is indicated, I think that the actual cautery will, in most instances, give better results than the cutting current or the bipolar current. Cautery effect can be varied a great deal by varying the heat of the electrode. In treating hairy nevi one should have an electrolysis outfit. I have tried various types, but prefer a battery set. It is less painful and produces less scarring when a low milliamperage is used. For the successful treatment of vascular and cavernous marks, radium is necessary. A fairly large flat plaque is indispensable. There are instances where needles or seeds can be used to advantage. One should be thoroughly familiar with the uses and dosage of whatever type of radium applicator he uses. Much caution is necessary in the application of radium.

#### SUMMARY

1. Treatment should be begun in certain types of birthmarks as soon as they are observed. Straw-

berry marks and cavernous nevi may enlarge rapidly, thereby becoming more difficult to treat as time elapses.

2. Parents should be advised as to which treatment is indicated, and the approximate length of time necessary for treatment and observation. They should also be advised as to what should constitute reasonably good results for the type of mark under treatment.

3. Proper instruments, skill in their use, patience, and judgment are necessary for good results in the treatment of birthmarks.

1930 Wilshire Boulevard.

#### DISCUSSION

L. R. TAUSSIG, M. D. (384 Post Street, San Francisco).—Doctor Caskey has very properly indicated that no one form of treatment should be considered as adapted to all types of nevi. I have had no experience with the use of sclerosing solutions in the treatment of vascular lesions, as reported by Andrews. This type of treatment may offer certain advantages, although it will be necessary to learn its limitations. In the larger cavernous hemangiomas, I have found that burying gold seeds of radon, combined with moderate surface radiation, hastens the cure and minimizes the amount of radiodermatitis very markedly. In the treatment of small non-vascular nevi, I employ the electrocautery or electrodesiccation, but prefer to accomplish the result with one treatment rather than to make use of repeated treatments. As Doctor Caskey states, surgical excision produces the best result in some of these lesions. There is no question but that electrolysis should be employed to remove the hair of a hairy nevus, before using any form of cautery. This treatment alone may eradicate the entire nevus. It is wise to warn the patients or relatives that removal of a birthmark necessarily will leave some scar.

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H. O. BAMES, M. D. (1134 Roosevelt Building, Los Angeles).—Unless we can promise a definite improvement with reasonable assurance, it would be better to leave nevi alone.

Destruction en masse always results in replacement by scar tissue which, because of its permanent whiteness, may be as definite a cosmetic disfigurement as the former highly colored one. It may even be worse, because of scar tissue retraction or keloidal overgrowth.

For this reason carbon dioxide snow or trichloroacetic acid, also diathermy, x-ray and radium, while useful in exceptional cases are distinctly not remedies of choice. The best remedy is one which will destroy the abnormal constituent, yet preserve the normal tissue.

In the pigmented nevi of small dimensions this is accomplished by fulguration with the Oudin current; scars are prevented by searing only to a depth no greater than the depth of the mole itself.

In the capillary nevi it calls for electrolysis with the galvanic current, or fulguration, destroying carefully each individual blood vessel and thus preventing scarring of the surrounding tissue.

The presence of blood vessels which are large enough to permit being entered with a needle and sclerosing fluid brings the whole nevus within the classification of where abnormal tissue exceeds normal in amount. In all such cases, and this also includes the larger moles, clean surgical excision of the entire mass is the remedy of choice.

The resection must be planned with a view to linear closure blending with normal skin lines. If the defect is too large to permit closure by direct approximation, it is to be covered with a full thickness graft; and in choosing the source of this graft, we must be mind-

ful not to create another cosmetic defect there. While the present vogue of sun worship limits greatly the available area of supply, it has also helped to alleviate our fear that the transplant might not ultimately blend in color, for apparently all parts tan.

To conclude, superficial nevi in punctate, stellate or diffuse form are best treated by dermatological methods, chiefly electrolysis or fulguration. Nevi which encompass the whole skin, vascular or pigmentary, and all those which contain larger blood vessels, are best treated by plastic surgery.

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Moses SCHOLTZ, M. D. (1930 Wilshire Boulevard, Los Angeles).—Birthmarks are a subject of considerable clinical interest, as they are a source of great anxiety to the parents. The speaker is to be commended for a conservative and practical presentation of the subject.

I heartily endorse two points emphasized in the paper. The first, that nevi can and should be treated as early as discovered. Many parents are afraid to treat birthmarks early in life, and prefer to wait until the infant gets older. As a matter of fact, infancy is the best age to treat nevi, since the cells and tissues of a younger individual are much more radiosensitive, and tissue repair in a younger patient, from a cosmetic point of view, is much more promising.

The second point is that the certainty of obtaining good cosmetic results grows in direct proportion to the length of duration of treatment. In other words, mild, cautious and well-spaced treatments are much more preferable than heroic, intensive and closely set applications.

The potentiality of cure and the facility of the technique varies greatly with different types of nevi. Of four common types—nevus flammeus, port wine, spider, pigmented and cavernous strawberry type—the first, port-wine type, which often covers extensive areas, offers the least satisfactory cosmetic results. Irrespective of the method applied—quartz light, pressure applications, snow or electrodesiccation—it is well-nigh impossible to obtain a uniform discoloration. Mottling effect is fairly certain to result.

The small spider-type nevus is easily improved and obliterated by cautious application, to the center of the lesion, of trichloroacetic acid, carbonic dioxide snow or electrodesiccation needle.

Pigmented nevi yield readily both to chemical snow and electrodesiccation, but one cannot be certain that the resultant scar will be cosmetically preferable to the removed mole. I personally do not encourage young females to remove pigmented moles on the face unless there are definite indications for it.

The most gratifying and promising cosmetically therapeutic field is presented by the strawberry type of nevus, which commonly is also the most disfiguring. In these cases results are often spectacular. Only two methods of treatment are applicable in strawberry-type nevus—chemical snow and radium. Snow, however, is applicable only in superficial and flat lesions. In cavernous elevated nevi, snow is contraindicated, as a deep scarring is sure to result; besides, the necessity of blistering to obtain the deeper effect adds another objection to surgical dressings and possibility of infection.

It is in these cases that radium reigns supreme and gives perfect cosmetic results. In lesions not exceeding its size, a ten-milligram radium plaque is sufficient. It is important to start with obliteration of the deeper layers of cavernous nevi by employing gamma rays, with appropriate filtration of one to three or more milligrams brass filters. No standardized technique as to the number of hours or thickness of filters can be given, as each and every case requires individual figuring. Variations of radiosensitivity of individual skins comes in strongly as a factor in therapeutic technique.

After the deeper layers of cavernous nevi are obliterated and the lesion has flattened down, the more superficial blood vessels are treated with beta radium

rays, with correspondingly lighter filtration and shorter exposures. The remaining superficial telangiectasis, particularly at the margins of the nevus, can be obliterated by electrodesiccation or touching up with trichloroacetic acid. Snow should not be used on skin subjected to prolonged and repeated radium applications.

The duration of treatment in these cases ranges from six months to two years. The treatments should be spaced farther apart as the case advances. Starting from weekly or biweekly treatments, the intervals should be increased gradually to one, four, and six weeks. More haste less speed, is a therapeutic motto to be remembered in these cases.

## KETOSIS—RELATION OF THE PITUITARY TO SEX DIFFERENCES THEREIN\*

By HARRY J. DEUEL, JR., Ph.D.  
Los Angeles

DISCUSSION by C. H. Thienes, M.D., Los Angeles; Howard F. West, M.D., Los Angeles; Emil Krahulik, M.D., Los Angeles.

IT was first shown by Deuel and Gulick<sup>1</sup> that women excrete larger amounts of acetone bodies in the urine during fasting than do men. Thus the ratios of the average excretion of acetone bodies, as determined from eleven experiments on five different women and twenty-two experiments on five different men, were approximately ten on the first fast day, six on the second, four on the third, and two and five-tenths on the fourth. In addition, much greater acidosis obtained in the women examined than in the men. The CO<sub>2</sub> combining power in one experiment on a female subject fell from a normal level to twenty-five volumes per cent of CO<sub>2</sub> on the fourth fast day, while in the male subject the reduction was only to approximately forty-five volumes per cent following a similar period of fasting. It is uncertain from these data whether the acetone body excretion would ultimately reach an identical level in the men and women following a prolonged fast. The closer agreement between the levels in the two sexes on the fourth day is to be attributed largely to the fact that several of the women in whom the ketonuria was the most severe had been forced to abandon the experiment by that time, while all of the male subjects had continued through this period. Therefore, the comparison of excretions on the fourth day is between the average of the experiments on those women in which the ketosis had been least severe and the mean of all the experiments on men.

### SEX DIFFERENCE IN KETOSIS IN ANIMALS

In order to determine whether this sex difference in ketosis could be demonstrated in other species, Butts and Deuel<sup>2</sup> administered sodium aceto-acetate to fasting male and female rats and guinea-pigs, and noted the urinary acetone body excretion. Although these animals do not normally develop an appreciable ketonuria during fasting, a

\* From the Department of Biochemistry, University of Southern California School of Medicine.

Read before the Obstetrics and Gynecology Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.



considerable quantity of acetone bodies was eliminated after the administration of sodium acetoacetate in a dose of 1.5 milligrams per square centimeter of body surface. The excretion in the female animals during a period of fasting as long as seven days was about double that of the males. In a later series of tests, Grunewald, Cutler, and Deuel<sup>3</sup> showed that following ovariectomy similar doses of sodium acetoacetate could be largely oxidized, and that much smaller amounts were excreted in the urine than occurred with normal female animals or even with normal males. Castration with the male resulted in an unmistakable but small drop in the level of excretion over that of the normal males. These experiments can be interpreted to mean that some substance is produced in the ovary which is primarily responsible for the increased ketonuria, either by causing a more rapid breakdown of carbohydrate or by stimulation of the fat metabolism. When theelin was administered to castrated male and female rats in massive doses, there was no appreciable effect on ketonuria. Theelin is probably not the substance which is responsible for the greater ketosis in females.

#### SEX VARIABILITY IN CARBOHYDRATE METABOLISM

The sex variability in carbohydrate metabolism was also demonstrated by the difference in level of liver glycogen in male and female rats fasted for various periods up to ninety-six hours after the administration of comparable doses of glucose (Deuel, Gulick, Grunewald, and Cutler<sup>4</sup>). Although no sex differences were noted in the level of liver glycogen in unfasted animals, which had been on a high carbohydrate diet, it was found that the liver glycogen was significantly higher in male than in female rats when they were killed without fasting after having partaken of a high-fat diet. In rats killed after a fast of 24, 48, and 72 hours after glucose, the value of liver glycogen was consistently higher in the male than in the female. In addition, the content of liver fat was invariably higher in the female animals than in the males. The level of liver glycogen after ovariectomy was appreciably higher than it was in normal females or even than in normal male rats.

#### ANTERIOR PITUITARY HORMONE

The presence in the anterior pituitary body of a hormone which produces ketosis suggested to us the possibility that sex differences in ketonuria might possibly be associated with variations in the production of this hormone. If this hormone were to act on a substance produced in the ovary, metabolic changes which would ultimately result in ketosis might be brought about. Such a hormone would be largely inactive in the male and in the ovariectomized female, but it would exert its characteristic effect in the normal female. However, when a neutralized alkaline extract of the anterior lobe of the pituitary was injected into fasting rats receiving diacetic acid, or receiving only NaCl solution, a markedly increased level in ketonuria resulted. The response was as great

in males as in females, and in castrated animals as in normals. These results indicate that the presence of the ovary is unessential for the development of ketosis. The normal mechanism probably involves a stimulation in production of the ketogenic hormone by some ovarian hormone other than theelin or theelol. There is some experimental evidence to indicate that the hormone, progestin, which is formed in the *corpora lutea* is responsible for this action. The ketogenic hormone is apparently a protein, inasmuch as we have found that it is destroyed by boiling, that it is precipitated from solution by alcohol, and that it is inactive when administered by mouth. It is not identical with the thyrotrophic hormone, since the latter has been shown by Krichesky<sup>5</sup> to be thermostable. It is also different from antuitrin S, the pituitary-like hormone present in the urine. Moreover, only a slight ketonuria occurred after the administration of the thyrotrophic, adrenaltrophic, and growth hormones kindly furnished us by Doctor Collip, although a considerable response followed the administration of his maturity fraction. The effect of the acidosis-producing hormone is increased by continuous injection over a period of at least five days. When the hormone was administered to normal castrated animals on high carbohydrate or high-fat diets, there was a definite lowering in the level of liver glycogen, but no consistent effect on the level of liver fat resulted.

#### IN CONCLUSION

Although the level of acetone bodies excreted by normal fasting, male and female rats receiving only NaCl solution, amounted on an average to about one milligram per day, a value of approximately 70 milligrams was obtained with one fasting female animal, which was later shown to be at about the fifteenth day of pregnancy. Experiments will be carried out to study the excretion of this hormone in the urine of rats during various periods of pregnancy. We believe, as do Burn and Ling,<sup>6</sup> that variations in acetonuria depend not alone on the fatty acid-glucose ratio of the diet, but also on the amount of the ketogenic hormone produced by the pituitary gland. An attempt is also being made to develop an immune serum by the continued injection of this pituitary extract into normal animals, with the object in view of determining whether such an extract can prevent the development of ketonuria during pregnancy in fasting rats.

University of Southern California School of Medicine.

#### REFERENCES

1. Deuel, H. J., Jr., and Gulick, M.: J. Biol. Chem., 96:25, 1932.
2. Butts, J. S., and Deuel, H. J., Jr.: J. Biol. Chem., 100:415, 1933.
3. Grunewald, C. F., Cutler, C. H., and Deuel, H. J., Jr.: J. Biol. Chem., 105:35, 1934.
4. Deuel, H. J., Jr., Gulick, M., Grunewald, C. F., and Cutler, C. H.: J. Biol. Chem., 104:519, 1934.
5. Krichesky, Boris: Proc. Soc. Exper. Biol. and Med., 31:600, 1934.
6. Burn, J. H., and Ling, H. W.: Quart. J. Pharm. and Pharmacol., 2:1, 1933.

## DISCUSSION

C. H. THIENES, M. D. (University of Southern California School of Medicine, Los Angeles).—The question arises as to the rôle of this ketogenic pituitary hormone in normal metabolism and its relation to the sex differences in metabolism. It is about equally active in males, females, and castrates, and this fact suggests that the factor involved is not responsible for the sex differences in ketosis of normal fasting animals.

The truth remains, however, that a distinct sex difference in metabolism exists in man and animals. This was first pointed out by Doctor Deuel, and has had ample confirmation in other laboratories. Such differences have long been suspected by clinicians, but without our present clear-cut proof. The ovaries, rather than the testes, are responsible for these differences, at least in animals, for Doctor Deuel showed that the carbohydrate and the fat metabolism of castrated female rats was similar to that of male rats.

More and more evidence is accumulating that the hypophysis regulates all phases of metabolism. Some functions seem to be controlled directly, as growth, but in most instances the secretions of this gland act indirectly through other glands. Examples of the latter secretions are the adrenotropic, thyreotropic and gonadotropic hormones. So far as Doctor Deuel's experiments have gone, the ketogenic extract of the hypophysis seems to act both directly and indirectly through the ovaries.

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HOWARD F. WEST, M. D. (1930 Wilshire Boulevard, Los Angeles).—One of the most interesting phases of physiologic and medical research during the past few years has been that of the gradual solution of the mysteries of the endocrine system. The story is obviously far from complete, which makes these observations of Professor Deuel the more interesting.

The effects of insulin, if not all the mechanism of its activity in carbohydrate metabolism, are widely known from its dramatic therapeutic achievements; but the part or parts played by pituitary hormones in the utilization of both carbohydrate and fat is a newer story, only previously guessed at, and one that promises equal interest and importance as it is unfolded.

As evidence is presented of this type, we begin to see more clearly some of the mechanisms involved in many of the metabolic problems encountered so often in clinical work. We begin to think of the metabolic peculiarities of pregnancy, and of the menopause, of many problems connected with diabetes, as well as those disturbances known to accompany primary pituitary disease and those conditions which tend to produce the ketogenic type of acidosis. We wonder whether this, or perhaps similar hormones may not be concerned in the excessive fat storage of certain obesities. This work is particularly suggestive when one remembers that more females than males develop diabetic coma. This increased susceptibility of the diabetic female might well be more marked were evidences of ovarian insufficiency in this group not so frequently observed. As shown in Doctor Deuel's article, the ketogenic hormone of the pituitary is not limited in its effects to the female, although the ovary apparently furnishes a powerful activator.

Recently Goldzieher, Sherman and Alperstein (*Endocrinology*, Vol. 18, p. 505, July-August, 1934) have presented observations from a somewhat different point of view, suggesting the possibility of a new diagnostic procedure for demonstrating pituitary activity. They determined the quantitative changes in the blood ketones, following a meal of fat. Normally there was a definite increase in the content of acetone and beta-oxybutyric acid, but this increase was absent in the blood of patients in whom there was definite evidence of pituitary deficiency. These changes, following the meal of fat, were quite similar to those following injections of the ketogenic anterior lobe extract. Unfortunately, these authors did not mention the comparative behavior of the two sexes during this

procedure, though there were, apparently, considerable individual variations in the blood ketone response. Professor Deuel is the first to note the consistent increased susceptibility of the female to conditions predisposing to increased acetone body production.

Research of this type promises to place our conception of the mechanism of ketosis and the interrelationship of the metabolism of fat and carbohydrate upon a more understandable basis than the oft-quoted expression, "The fats burn in the fire of the carbohydrates."

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EMIL KRAHULIK, M. D. (1680 North Vine Street, Los Angeles).—These experiments are paving the way for others which will have more immediate practical application. That metabolism should respond to changes in endocrine function, is significant. During pregnancy there exists an extremely efficient metabolism with storage of fats on very low calorie diets, which is a response to the endocrine changes occurring at this time. Some explanation will be forthcoming to explain the resistance to prolonged "fasting" in hyperemesis. Those who have been striving to blame the endocrines for eclampsia may eventually be rewarded.

### TREATMENT OF LOW GRADE EPIDERMOID CARCINOMA BY MEANS OF RADIUM NEEDLES\*

By ORVILLE N. MELAND, M. D.  
Los Angeles

DISCUSSION by Edward Leef, M.D., San Francisco;  
George S. Sharp, M.D., Pasadena; H. J. Ullmann, M.D., Santa Barbara.

EVER since radium was first used in the treatment of epidermoid carcinoma, it was noticed that some varieties disappeared very quickly, while others were slow in their regression. Some pathologists also saw that those tumors which were poorly differentiated usually responded readily to radium, while those that were well differentiated were less easily affected. Likewise, surgeons operating on a number of patients with this disease discovered that their best results for permanent cure were in the well-differentiated group, while in the undifferentiated group recurrence was frequent and curability was rare. Since Broders brought out his grading of these tumors from the standpoint of degree malignancy, a few pathologists have frequently qualified their diagnosis by the words "radio-sensitive," or "radio-resistant," so that now Broders' Grades 3 and 4 are looked upon as the sensitive group, and Grades 1 and 2 are classed as resistant. The result of this laudable attempt on the part of the pathologist in directing the type of treatment has been to view the epidermoid carcinomas of low grade as not amenable to radiation, but to class them as strictly surgical in scope. It is true that the best surgical results are found in this group, but that they will not respond to irradiation is not correct.

#### CLINICAL MATERIAL STUDIED

This paper is a study of the epidermoid carcinomas of Grade 1 that we have observed during the past three years. During this time we have

\*Read before the Radiology Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.

CHART 1.—Showing Location of the Carcinomas

Tongue .....	6
Lip .....	6
Buccal surface cheek .....	5
Hard palate .....	2
Skin	
(a) Nose .....	3
(b) Upper lip .....	2
(c) Neck .....	2
(d) Cheek .....	1
(e) Labia .....	3
(f) Finger .....	1
(g) Ear .....	1
Total .....	32

seen thirty-two patients with this type of malignancy, and all have had a thorough histological study. Chart 1 shows the location of these carcinomas.

Chart 2 shows the variety of treatment used in all of these conditions. Radium alone, or in some combination with electrosurgery, has been used. Chart 3 indicates results of treatment with different methods.

classified as failures, but were successfully treated by electrosurgery. On the other hand, there were six patients treated by electrosurgery with three recurrences, none of which responded to surface applications of radium. These were extensive lesions, involving bone, and were not suitable for interstitial radiation. All three of them died of their disease. The best results were obtained by the use of radon seeds and platinum needles containing one or two milligrams of radium, plunged into and around the lesions; in all cases there was a successful primary result.

#### RADIO-RESISTANT AND RADIO-CURABLE LESIONS

The purpose of this paper is to demonstrate the fact that even though a lesion is classed by the pathologist as radio-resistant, it may still belong to the group of radio-curable lesions. The response is much slower to radium than is found in the radio-sensitive lesion, but the primary result is just as favorable. It must be admitted that epidermoid carcinomas belonging to this classification

CHART 2.—Showing Types of Treatment Used

Location	No. of Cases	Radon Seeds	Radium Needles	Surface Radium	Electrosurgery				Nothing Done
					Alone	Radon Seeds	Radium Needles	Surface Radium	
Tongue .....	6	5	0	0	0	0	1	0	0
Buccal surface cheek...	5	0	1	2	0	1	0	0	1
Lip .....	6	0	1	3	1	0	0	1	0
Labia .....	3	0	3	0	0	0	0	0	0
Neck .....	2	0	2	0	0	0	0	0	0
Skin—Miscellaneous ...	10	0	1	1	5	0	0	1	2

#### ANALYSIS OF RESULTS

In analyzing the results, no attempt is made to indicate the permanency of recovery (that is, the five-year end-results). Rather it is to find out whether these low grade, so-called radio-resistant lesions may be treated by radium with success. The charts show that the response to surface radiation is not as favorable as when platinum needles or radon seeds were used. Two patients treated with radium applied to the surface were

may also be treated surgically with equally good results when wide excision is done; but when the disease appears on the buccal surface of the cheek, or on the tongue where a large mutilating operation is required for success, or if it is present in an aged individual in whom the operation and the anesthetic are hazardous, it is justifiable to resort to radium.

Success is largely dependent on technique; either needles or seeds assure the best results. Except

CHART 3.—Results of Treatment

Types of Treatment	No. of Cases	Result
Platinum radium needles interstitially.....	7	All primary healing
Radium seeds interstitially.....	5	All primary healing
Surface radium .....	8	Six are well. Two failed but are well after electrosurgery.
Electrosurgery alone .....	6	Three are well. Three recurred—all died of disease; these were quite extensive and involved bone.
Electrosurgery plus radium needles.....	1	One well
Electrosurgery plus radon seeds.....	1	One well
X-ray therapy alone.....	1	Improved
Nothing done.....	3	All dead



when operating on the tongue, we prefer needles whenever possible, since the reaction is not so severe; the radiation is more constant and the quality of radiation is harder. In the tongue it is difficult to maintain the exact position of needles for a week, as needles fall out after a few days. Feeding is a problem, and the risk of infection is great. In this location, in our opinion, seeds are preferable. The disadvantage of using needles is the expense of hospitalization, and the discomfort from needles left *in situ* five to ten days, depending upon the radium content of each. Seeds, on the other hand, do not necessitate any suturing and require no prolonged hospital stay. Failures, especially in the mouth, are due to inadequate dosage and such complicating factors as infection, and the endarteritis accompanying lues.

#### SUMMARY

1. Epidermoid carcinoma of Grade 1 responds well to interstitial radiation either in the form of seeds or needles; despite its being classed as radio-resistant, it is still radio-curable.

2. Except when the disease is in the tongue, platinum needles give a preferable result.

3. It is justifiable to use interstitial radiation where surgery requires a major operation, despite the fact that in this group surgery alone gives excellent results.

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#### DISCUSSION

EDWARD LEEF, M. D. (Stanford University Hospital, San Francisco).—It has not been our practice to divide the epidermoid carcinoma into different grades of malignancy. Neither have we had the opportunity to treat many cases by interstitially placed radium needles, because our supply of radium is not great and the amount in needles is only a small part of this. However, when we know that we are dealing with an epidermoid carcinoma, it is treated vigorously, either by surgery, radium, or x-ray. Most of the superficial skin lesions which we see are treated with a single large dose of unfiltered x-ray; 3,000 r at a single sitting, or up to 4,000 r in divided doses over a period of a week. On the lip we use a radium pack with a dose equivalent to 500 milligram hours or more at one centimeter distance. We rarely employ radiation for an epidermoid carcinoma on the back of the hand, for in such a case we have found that we dare not use a dose large enough to eradicate the tumor without the likelihood of producing a damaging result.

It is gratifying to have demonstrated that even though a lesion is classified as radio-resistant, it still may be radio-curable, may be treated as such, and a mutilating operation avoided.

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GEORGE S. SHARP, M. D. (605 Professional Building, Pasadena).—Doctor Meland's paper further clarifies our knowledge of the general group of epidermoid cancers. He emphasizes the necessity of biopsy as the initial step in the treatment of this group of cancers, and declares that the treatment should be based on the tissue examination, according to their type, grade, and degree of radiation sensitivity.

Epidermoid cancers may arise from any epithelial surface of the body, and no group of cancers have a more diversified behavior and clinical course. It is important, therefore, to further differentiate this group in order that proper therapy may be instituted for the individual case. Microscopic grading of cancer is the first step in the treatment, and Doctor Meland has stated as a general rule that the Grades 1 and 2 are the radioresistant types, and Grades 3 and 4 are radiosensitive. The location of the growth may be a

good clinical index as to the grade, and particularly the radiation sensitivity. For example, in the oral cavity, cancer of the lip, the tongue, cheek, gum, or palate are more frequently of the resistant type, that is, of Grade 1 or 2, while cancer of the floor of the mouth, tonsil, pharynx, and extrinsic larynx are more sensitive to radiation. It is interesting to note that the mucous membrane, where the resistant cancers develop, is different from the mucosa of the pharynx. The mucosa of the lip, tongue, etc., is prone to develop leukoplakia, while leukoplakia is not observed over the mucous membrane where the radiation sensitive epidermoid cancers are most frequently found. Therefore, cancer in the presence of leukoplakia may be looked upon as one resistant to radiation. Certain of these clinical features must be considered with the grading, because many times we encounter a Grade 2 cancer on the pharyngeal wall which responds as a sensitive type. And, on the other hand, occasional cancers on the lip which are reported as Grade 1 will demonstrate a maximum response to radiation. Depth of infiltration, type of underlying tissue, and blood supply, may have a more active rôle in sensitivity than is generally understood.

Doctor Meland emphasizes the necessity for varying the treatment and dosage of radiation according to all of these factors. The delivery of a lethal dosage of radiation is the primary problem, and it matters little whether the total dose to the cancer is delivered by x-ray, radon or radium, or all three combined, so long as the application can be made accurately and with a minimum of trauma. For interstitial radiation the radon seeds are the most adaptable for all cases, but the radium needles are equally serviceable for the majority of epidermoid cancers.

The most common cause for failure in the treatment of an early epidermoid cancer is due to an inadequate dosage of radiation.

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H. J. ULLMANN, M. D. (1520 Chapala Street, Santa Barbara).—Doctor Meland's paper adds evidence in support of a belief, or strong impression, that I have had since 1923. At that time it was generally considered necessary to treat any cancer intensively, and that the first dose or treatment was the important one. My experience both as a clinician and a radiologist made such a definite procedure for all cancers seem preposterous, and in two papers that year and in subsequent publications I urged that cancer in any particular patient be considered a special problem. Then the idea of radiosensitive tumors, identifiable by their histologic structure, was advanced and found to largely hold true for the commoner forms. Again, many exceptions were observed, and tumors with identical growth and histologic pictures were found to vary largely in their response to radiation. Many tumors have been found that, while resistant to one form of radiation and classed histologically as radio-resistant, will regress under another. This has been well brought out in Doctor Meland's paper. I have had, within the last year, an excellent example to illustrate the above statements. A woman with a myxofibroma filling one-half the abdomen and found inoperable on exploratory laparotomy was treated with roentgen radiation filtered by two millimeters of copper. Small doses were given daily over a long period with several rest periods, and the tumor has shrunk to one-third its original size and the patient is symptom-free. And yet, myxofibromas, as a group, are not considered at all radiosensitive.

The author's article is timely and should be studied by those inexperienced enough to believe that because one tumor has failed to respond to radiation another of the same type will behave similarly.

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DOCTOR MELAND (Closing).—The purpose of the paper is to call attention to the radio-curability of epidermoid lesions that are classed as radioresistant. This is a relative term only. Lesion's belonging to this class must, as Doctors Sharp and Ullmann say, be given a lethal dose before recovery will take place.

## PHYSICAL THERAPY—CRITICISMS AND SUGGESTIONS\*

By H. M. F. BEHNEMAN, M. D.  
San Francisco

DISCUSSION by Charles B. Pinkham, M.D., San Francisco; Howard H. Markel, M.D., San Francisco; J. J. Loutzenheiser, M.D., San Francisco.

IT is an undeniable and distressing fact that the oldest form of treatment known to man is in ill repute with the laity, the physician, and the insurance carrier. Physical medicine in the State of California is in dire need of a housecleaning. Undoubtedly, the industrial surgeon sees innumerable instances of the misapplication and abuse of this adjunct to medicine and surgery. He, as well as the insurance carrier, has just cause to be thoroughly disgusted with this field of therapy. The mere mention of the subject brings to mind visions of delayed recovery or prolonged disability. Why should this age-old form of therapy, fathered by Hippocrates and Aesculapius, appear in this era of modern medicine in such disreputable company, exploited by charlatans and infested with the parasites of various cults?

### WHY THE NEGLECT OF PHYSICAL THERAPY

In my opinion, the primary factors contributing to this state of affairs are as follows:

1. The negligence of ourselves, both in our delayed acceptance of this specialty, and in our hasty, often irresponsible, manner of its execution.
2. Its use and abuse by thousands of quacks and charlatans.
3. Failure of accomplishment in many cases, due to faulty diagnosis, improper directions for treatment, its use in the face of contra-indication, overdone or insufficient treatment, and gross negligence and ignorance on the part of an untrained technician.
4. The unfair practice of sending chronic patients to physical therapy just because they fail to progress in every other department of medicine.
5. The mistake of regarding physical therapy as a cure-all. It is far from it, and is merely an adjunct to other methods of therapy.
6. The inexcusable practice indulged in by members of our profession in having a physical therapy technician in the office purely as a means of financial gain.
7. The rank dishonesty of innumerable salesmen representing equally questionable firms, making preposterous claims, inveigling thousands of doctors into the purchase of worthless apparatus, giving lecture courses that are essentially high-pressure selling methods, and, last but not least, charging an enormous price for some nice, shiny, space-consuming trash.
8. The unfortunate fact that the most ignorant layman can buy from almost every dealer any piece of physical therapy apparatus, some of them

capable of producing injury, disease, and even death.

9. The still more unfortunate fact that there is no law in this State prohibiting any individual from masquerading as a physical therapist and blatantly announcing it in various manners. There are over ten thousand registered physicians in this State. For every one, there are four to five cultists of various sorts.

10. The regrettable fact that many insurance companies have unduly paid out large sums for physical therapy without results, because of contra-indication or improper treatment.

11. Our own laxity in not being as meticulous in referring patients to a competent physical therapist as we are in referring patients to other specialists.

12. The lack of instruction in medical schools.

13. The paucity of truthful, scientific papers before medical groups.

14. Faulty diagnosis, with irrational directions for treatment.

### OTHER FACTORS TO BE CONSIDERED

There are other factors that are just cause for doubt and discouragement. However, I am fully aware of the presence of some excellently trained and competent workers. I recognize the fine work being done, but it is in the minority. The honest, educated technician does her work under written orders from a physician, who gives the diagnosis and outlines the rational procedure.

The important facts are these: The laity is constantly the prey of so-called physical therapists, absolutely devoid of training, without the least knowledge of the fundamentals of medicine. Their money is taken dishonestly, and often their bodies are subjected to ridiculous, painful and harmful procedures. Secondly, the honest, well-trained, competent technician suffers financially and professionally. But last, and most important of all, the medical profession sees the cultist and the charlatan treating patients who should be under the guidance, if not the treatment, of a physician. The whole situation reverts to cast its shadow upon the medical profession.

### WEAKNESS OF EXISTING LAWS

Legally, in California at present, any individual possessed of the finances and ambition may purchase and use all types of physical therapy and roentgen-ray apparatus without violation of a single law. He can only be prosecuted if the Medical Board of Examiners, under authority of Section 17, can prove that he treated a diseased condition. Our metropolitan newspapers carry daily columns of advertising under the legal, but deplorable titles of bathhouses, colonic irrigation, nurses, masseurs, physical therapy, and roentgen ray. They are too often the deliberate listing of individuals and establishments that discredit the policing of our cities. When these charlatans are brought before the courts for prosecution, it is almost impossible to get a jury to give a conviction. The colonic irrigationist suavely states he

\* Read before the Industrial Medicine and Surgery Section of the California Medical Association at the sixty-third annual session, Riverside, April 30 to May 3, 1934.

was only giving an enema, the masseur was just giving a rub-down, and the clubhouse trainer does all of physical therapy within the law, because the club physician or nurse saw the victim and once took his blood pressure!

This is all illegal, unethical, and uncontrolled practice of medicine. What are we going to do about it? Our ethics do not permit us to become soap-box orators in a fiery crusade against the quack, but we are strong enough as a unit, and as individuals, in the dissemination of ideas to correct this evil. The laity certainly will not correct it.

#### WHAT IS THE SOLUTION

What is the solution? I am perfectly aware of the existence of the Committee on Physical Therapy of our state society. My understanding of the purpose of that committee, however, is this: To make a survey of institutions and equipment, to promote teaching, to investigate establishments, to encourage presentation of papers and the distribution of literature. I am heartily in accord with that idea, and its able execution by Doctor Hibben and his colleagues.

My plea, however, is for legal regulation, giving the State Board of Medical Examiners the power to examine and regulate under a limited license all physical therapists, confining their activities to work referred and supervised by physicians, with no blanketing-in of those in practice at present. It can be done, but it must be done through the State Legislature. We can do our part as individuals and as a group. You can name captains of your assembly districts, and they in turn can name their workers among the doctors living in that area. The doctor can contact innumerable people. It has to be done soon.

Within a few months the naturopathic group, if successful in the securing of signatures, will present an initiative law as a means of gaining their ends. Physical therapy is flatly stated to be included in the definition of naturopathy. They seek their own governing board and demand in Section 3 that "No law . . . shall . . . prohibit . . . the purposes and provisions herein contained."

This attempt follows the Superior Court decision on January 16 last, of Judge William P. James re: the California Chiropractic Act wherein he ruled that special therapies (included in the field of physical therapy) "is not included . . . under the authority of a license or certificate issued under the Chiropractic Act."

#### OTHER STATES HAVE ADEQUATE LAWS

Other states have enacted the law that we require. New York has a medical practice act providing for the examination and licensure of physical therapy technicians. Such a technician cannot practice medicine except to treat diseases under the supervision of a duly licensed physician.

Ohio's Medical Board has a strict, limited practice act covering massage. Its qualifications are high, and its penalties for violation are strict.

Minnesota's law states that the practice of massage comes under the jurisdiction of the State Medical Licensing Board.

It is law we need, not just investigation and education. These have been tried with some success, and they may convert the doubtful ones to our faith in physical medicine; but neither do they regulate rational therapy, nor protect the layman from dishonest and grievously harmful procedures. Two examples of the difficulties of accomplishment by education are these:

In 1932 the House of Delegates of the California Medical Association refused a separate section in physical medicine because of the intimate relationship of physical therapy to so many other specialties of medicine. Our desire to give and publish more material in this field was thus promptly stifled. Secondly, the Council on Physical Therapy of the American Medical Association, even now in its desire to educate, has not and does not approve a single school in America for training in this subject.

#### IN CONCLUSION

My plea for legal regulation of technicians is made before this section because I feel that the industrial physician and surgeons see more good and more lamentable results than any of their colleagues. The medical profession has been attacked and buffeted about by the laity, often to the point of exasperation. Aside from the possible damage to the disabled, the industrial surgeon will have increasing difficulties with patients and insurance carriers if the physical therapists are licensed by any other agency than the State Medical Board.

Some of you never use this form of treatment, some of you may doubt its efficacy, but in either case this mode of therapy is fundamentally sound, and is an integral part of the practice of medicine. Upon this premise, if no other, then you should be vitally interested in legislative action. If this naturopathic initiative passes, it not only includes physical therapists, but provides that those technicians may practice medicine and surgery in all "institutions supported wholly or in part by public funds and to disability compensation."

#### LAY AND PROFESSIONAL VIEWPOINTS OF PHYSICAL THERAPY

In the mind of the public, the term "physical therapy" signifies electricity, lamps and machinery of various sorts. In the mind of the physician, however, its true definition remains that of body mechanics, massage, and postural training. His conception of a good technician is that of an intelligent graduate in nursing or physical education, with added training in physics, physiology, anatomy, and the fundamentals of body mechanics. Ninety per cent of honest physical therapy needs only good brains and good hands for its execution.

#### PHYSICAL THERAPY AN IMPORTANT ADJUNCT TO INDUSTRIAL SURGERY

Such physical therapy is an adjunct to industrial surgery. If it continues to drift into the hands of quacks, and, moreover, to become legalized, several will pay for this misfortune, but unfortunately the victimized patient will pay the most. This appeal to you is made because you are the



chief contact between industry and medicine. You can speak of this situation to the companies you represent; they employ a good many voters in California. You can do a great service to maintain individualism in medicine by this effort to place physical therapy technicians under the regulation and control of the State Board of Medical Examiners. You can do it through your county society, through the press, the radio, but mostly by immediate contact with your representative in the State Legislature. Such action on your part cannot be construed as fear that we are losing more medical practice to the laity, but that we are defending one of the vital principles in the heritage of medicine, our moral obligation to bestow honest and rational medicine upon those who seek it from us.

384 Post Street.

#### DISCUSSION

CHARLES B. PINKHAM, M. D. (450 McAllister Street, San Francisco).—Doctor Behneman has frankly stated many conditions that today exist in California. In so doing he has ridden rather rough-shod over the medical profession because of their lack of interest in physical therapy which, of late years, has been found increasingly beneficial, particularly in industrial surgery.

Doctor Behneman has stated that the definition of physical therapy in the mind of the physician "remains that of body mechanics, massage, and postural training," whereas in the mind of the public the term "physical therapy" "signifies electricity, lamps, and machinery of various sorts." The public mind has developed its definition largely from the advertisements carried in our daily papers, which proclaim that the one who paid for the "ad" (often a licensed chiropractor) offers treatment by electric appliances, including the "electronic" or the "pathoclastic" system, by massage, hydrotherapy, colon flushing, etc.

Physical therapy is not found classed as a medical specialty in the 1934 issue of the directory published by the American Medical Association.

In the title and text of the chiropractic initiative, which is expected will be on the ballot at the coming November general election, reference to physical therapy will be found.

It is often claimed by chiropractors that their group is responsible for the development of physiotherapy. This claim is disputed by graduates of medical schools and by various groups of drugless practitioners other than chiropractors.

Doctor Behneman reminds us that the advertising columns of our metropolitan papers (often under the caption "personal") are crowded with advertisements offering "physiotherapy," "massage," "Swedish movement," etc. According to the police departments, questionable practice is carried on in many of the places so advertised. The kind of "therapy" supplied the patron in some of these establishments has caused metropolitan enforcement powers to draft local regulatory ordinances intended to correct the existing evil.

The California Medical Practice Act makes no specific provision for a license entitling the holder to practice physical therapy, massage, etc. The Act provides for the granting of a drugless practitioner's license. Such license includes all branches of drugless practice.

Doctor Behneman, in commenting further, says: "Physical medicine in the State of California is in dire need of a house cleaning." Yet but few licentiates are aware of the legal obstacles which surround any attempt at the suggested "house cleaning." Section 17 of the Medical Practice Act states that any unlicensed individual who treats, diagnoses, or prescribes for any ailment of the human system, or holds himself out as so doing, is guilty of violation of the

Medical Practice Act. Admissible evidence must satisfy the trial judge or jury beyond a reasonable doubt that Section 17 has been violated by the defendant at bar. If guilty the penalty imposed is discretionary with the trial judge. Observance of law is the objective in all prosecutions under this section.

Many licensed chiropractors in this State claim the right to use all forms of physical therapy including electrical appliances of all kinds. Many are removing tonsils, hemorrhoids, etc., by the electrocoagulation method. This group has disregarded the opinion rendered by Attorney-General Webb to the Board of Chiropractic Examiners of January 26, 1926, wherein he held that "electrotherapy, hydrotherapy, and other systems of treatment do not come within the scope of chiropractic practice." Failure to observe this opinion rendered by the Attorney-General resulted in an injunction proceedings against Doctors Steele and Steele, licensed chiropractors of Palo Alto. Superior Judge James of San Jose, after hearing this case, rendered an opinion which sustained that of the Attorney-General. Judge James's decision was printed in full in CALIFORNIA AND WESTERN MEDICINE February 19, 1934, page 142. An appeal is now pending before the Appellate Court.

Doctor Behneman mentions certain states wherein the Medical Practice Act provision is made for a license to practice physical therapy, massage, etc. Each of these states, particularly Ohio, claims its regulations of these groups to be most beneficial to public welfare and safety.

A carefully drawn amendment to the California Medical Practice Act, wherein is set up machinery for the licensing of hydrotherapists, x-ray technicians, and masseuse, would correct the conditions stated by Doctor Behneman. Thereby would our citizens be afforded added protection against the unskilled and unscrupulous.

But if the chiropractic initiative becomes a law at the November general election, physical therapy (as defined in Section 2, Subdivision B thereof) will forever be under the jurisdiction of the Board of Governors created in said initiatives.

Because physical therapy is included in the definition of naturopath, Section 2, Subdivision 4, of the Naturopathic Initiative (which also will be on the ballot on the November general election), physical therapists licensed under either of said initiatives will present a most confusing enforcement problem to determine whether said physical therapists will be regulated under the provisions of the chiropractic or naturopathic initiative.

Ponder over the provisions of Section 3 of the naturopathic initiative reading: "No law now or hereafter enacted shall in any way qualify, regulate, restrict, or prohibit the State Association (Naturopathic Association of California) from fully carrying out and effectuating all of the purposes and provisions herein contained."

✽

HOWARD H. MARKEL, M. D. (384 Post Street, San Francisco).—I heartily agree with Doctor Behneman regarding the deplorable state of affairs in which physical therapy exists at the present time. A number of very fine and ethical persons, mostly women, have taken courses in eastern training schools for physical therapy and are treating patients in an absolutely ethical manner under the diagnosis of duly accredited physicians. They are anxious to follow the physician's orders in every particular, not only that no harm may be done, but that the greatest good may be accomplished.

In order that these persons may work in this manner, it is necessary for the referring physician to make the proper diagnosis and acquaint the physical therapists with the same, and the physician should also have a very clear idea himself of the treatment that he desires given. Many physicians leave the outlining of the type of treatment for the patient up to the judgment of the physical therapist. In my

opinion the physician himself should know exactly what he wishes instituted and see that it is followed out.

It is very important that at the next meeting of the State Legislature, in January, 1935, that proper legislation be secured and also certain other bills be stopped. The Naturopath Bill is certainly one that should not be allowed to go through. A bill should be introduced which would place the physical therapy technique under the regulation and control of the State Board of Medical Examiners. This is a necessity of greatest importance, in order that proper control is maintained over this important branch of therapy. It is up to public health organizations to see that a proper reformatory act is properly introduced and carried through.

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J. J. LOUTZENHEISER, M.D. (350 Post Street, San Francisco).—The value of the use of physical methods in treatment has been established by years of scientific endeavor. Medicine is highly honored by the names of John Hunter, Duchenne, Delpach and others. These men substantiated the need of and indicated the various uses for physical therapy by sound scientific experiment.

If there has been a failure in the proper management of physical therapy—and we know that such is the case—such failure is due to the fact that at times we ourselves lack proper knowledge of the indications and technique of this valuable adjunct to both medicine and surgery. This situation makes Doctor Behneman's timely plea for the scientific practice of physical therapy particularly valuable.

It is unnecessary to enumerate the many uses of physical stimuli in the field of purely medical therapy. The intimate relationship of cutaneous and muscle function with both reflex and central nervous mechanism in itself points the way to a large field of endeavor. The relation of the peripheral circulation to its physical environment—the determination of inadequacies in the neuromuscular relationships through electrical stimuli—the catalytic and other action of light components and electrons, and many other physiadjuncts show the necessity for a sound knowledge on the part of the individual who is directing such therapy.

In the field of traumatic surgery it has been obvious for some time that too much has been expected of physical therapy; not because of its lack of value, but rather because of the untimeliness of its application. The question we should ask ourselves is how can we best reestablish the normal physiological mechanism? In establishing this objective, physical therapy can accomplish its fullest purpose. It is much more valuable to use physical therapy to maintain muscular tone and other normal physiological processes than allow them to become moribund and then attempt to restore them through misplaced credulity in the claims of the manufacturers of lamps and other apparatus.

Needless to say, it is absolutely necessary for the physician or surgeon directing such treatment to know more of the indications and value of physical therapy than the person he directs to do the work. It is asking altogether too much of even the best trained physiotherapist to have a comprehensive knowledge of anatomy, physiology, and pathology without which no intelligent direction of physical therapy is possible. The actual mechanics of treatment can then be safely left in the hands of the physiotherapist.

✱

DOCTOR BEHNEMAN (Closing).—As I write this paragraph, only six weeks has to elapse before the votes of California determine the fate of the Naturopathic Bill. The public health of our citizens is menaced and the sanity of scientific medicine is in jeopardy of its just control of medical practice. The medical profession has a rational use for physical therapy, but if this bill passes, its indiscriminate use by the laity will surely result in a deplorable situation.

## POSITIVE THERAPEUTICS—THE PENDULUM SWINGS TO IT

By L. H. O. STOBBE, M. D.  
Salt Lake City, Utah

DISCUSSION by G. Gill Richards, M. D., Salt Lake City; D. E. Smith, M. D., Salt Lake City; O. J. LaBarge, M. D., Salt Lake City.

**T**HERAPEUTIC nihilism seems to have dominated the medical profession for the past four decades. The reaction against useless concoctions of herbs and "gun-shot prescriptions" of worthless medicines; the consequent discarding of secrecy and of Latin prescriptions; the growth of drugless cults and of the patent-medicine business; and the general recognition of the importance of forms of therapy other than treatment by drugs, caused not only the downfall of homeopathy, but also caused the pendulum to swing too far toward therapeutic nihilism.

### NUMBER OF SPECIFIC MEDICINES LIMITED

Many prominent physicians in nearly all localities today claim that there are only about one dozen really great medicines, few of which are really specific; and that there are a few more of minor importance that can be classed as essential drugs with some value in meeting special indications. According to them the bulk of our pharmacopeia is but of passing historic value. These same men also decry physiotherapy apparatus as a doubtful adjunct; diets and dietitians as a passing fad; baths (as at famous resorts) as a medieval joke; and drugless cults, patent-medicines, and detail men from pharmaceutical houses as a menace to society. In fact, so far have some physicians gone in their nihilistic theories that they can hardly see any good even in their fellow practitioner's attempt at any program of orthodox medicinal therapy in any given case.

In the field of diagnosis no one cares to compete with the modern up-to-date physician, who is trained in pathologic physiology; but in the field of therapeutics this same physician has thousands of competitors, from charlatans to neighborly friends, all of whom claim to know more than he does about managing that pathologic physiology.

### EMPTINESS OF THERAPEUTIC NIHILISM

The emptiness of therapeutic nihilism has given rise to much of the therapeutic charlatanism. The general indifference of the scientific modern physician to the lesser niceties and minor adjuncts in treatments has allowed inroads to be made into his practice, and the physician's nihilistic tendencies have turned the public in despair to self-medication, and to seek help elsewhere. Is not the spectacular growth of the patent medicines and the chain drug store octopuses an evidence in itself that medicines do have a value, and that the public does get results with them? How much more effective would these patent and proprietary medicines be if the medical profession understood them, and guided their use intelligently! How often do we find a patent or proprietary drug in the home of our patient, and how often do we find our patient augmenting or even replacing our

recommendations with them? Should we continue to condemn and politely ignore these, or is there a better solution? Nihilism breeds discontentment and a search for something or someone else.

Honesty and truth are prime essentials. Fakirs have no place in ethical medicine. Half-truths and borderline honesty and deceitful practices are not lasting. Falsity is dissipated in the sunlight. When a parent trusts the life of the seriously ill little loved one to the care of a physician, would he dare give placebos and psychological hodge-podge trash! Could such a doctor have a clear enough conscience so that he could sleep at night, or to face the parent shamelessly? The armamentarium of the therapeutic nihilist is so ridiculously meager that if the patient could but suspect it he would be horrified, or at least he would not dare trust his life with him in any serious affliction.

#### PHYSICIANS SHOULD USE ALL AGENTS AT THEIR DISPOSAL

In the general management of our patients, and in the treatment of their diseases, it is not only our privilege, but also our solemn duty as physicians to see to it that we do not neglect to make application of any of the agents at our disposal that may reasonably be expected to help. We now have a host of methods that are found to be absolutely trustworthy for preventing disease, for alleviating or palliating, and for healing. We can make use of rest, drugs, biologics, serums, vaccines, diets, hot and cold packs or baths, exercise and massage, heat, light, electrotherapy, radiotherapy and x-ray, climate and heliotherapy, mechanical appliances, surgery, general nursing care, health resorts and mineral springs, psychotherapy and social influences, and a thousand miscellaneous procedures.

Accurate clinical observation and actual clinical experience show that drugs are essential in the treatment of diseases, and that even symptomatic pharmacotherapy does have a place in the management of these diseases. The failure of physicians to observe accurately, and to carefully record results obtained from their prescriptions, has caused a lack of advance in therapy as well as an unwarranted loss of confidence in drugs. And the growth of the patent-medicine business and modern drug stores is an evidence of the loss of confidence in the medical profession on the part of the more intelligent public.

#### NEED OF A THERAPEUTIC AWAKENING

There needs to be a therapeutic awakening. The pendulum now swings from nihilism to an honestly thorough positive therapeutics. Drugs must again come to the foreground in the treatment of human ailments. As Clendening says, after rest, drugs are the most useful and effective therapeutic measures at the physician's command. The field of pharmacotherapy must not wane and retrograde, but must keep pace with all other advancement in medical science. Fantus stands out like John the Baptist in the wilderness begging the medical profession to use drugs, and to compound them properly. Nearly all therapists find hosts of drugs essential in their respective lines. Let us forget therapeutic nihilism.

The medical profession, least of any in the world, should never even think of, nor preach, the doctrine of therapeutic nihilism. Do not even whisper such doctrine to your best colleague. Remember that you can rub the spine, twist the joints, massage, adjust, or hammer patients, if necessary; you can resort to prayer, profanity, or incantations; and you can prescribe diets, vegetable juices, patent medicines, or anything else thought to be efficacious in the particular illness under consideration, as well as any pseudo-medical cult in existence, and you have that privilege and license. Physical therapy, dietetics, pharmacotherapy, "natural methods," osteopathy and all other "pathies"—all are adjuncts in the treatment of disease, constantly with an eye to the prevention of all disease, making the earth a true millennium. But, of course, true ethical medical and surgical practice holds first place at all times when someone's life depends upon you. The treatment must at all times be consistent with the physiology, bacteriology, and pathology of the case at hand.

Let us be grateful that there are such things as specific medicines, semi-specific, helpful and even worthless ones. Let us be grateful, too, that there is such a thing as a laxative pill, or a tonic, or even emenagogues and aphrodisiacs. Therefore, let us shake off our lethargy, forget the negativisms, and resolve to swing to more positive therapeutics.

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#### DISCUSSION

G. GILL RICHARDS, M.D. (115 East South Temple Street, Salt Lake City, Utah).—I am very happy to have the opportunity to discuss this paper by Doctor Stobbe. It is gratifying to see one of the younger men openly declare himself in favor of the definite value of medical therapeutics. It does not mean that he has joined that large group whose medical therapeutics is guided and enlarged by each visit of representatives of the various pharmacological manufacturers. It shows that in his comparatively few years out in practice he has learned by experience the value of certain drugs and the uselessness of others. He has been open-minded enough to give credit where it belongs, and sufficiently observant to note the unjust criticism of many men who like to class themselves as highly scientific and yet who feel it beneath their professional dignity to concede value to but a very small group of drugs.

I think the doctor is justified in attributing to therapeutic nihilism, which has been very popular in particular groups of our profession, the cause of much of the gigantic growth of patent and proprietary medicines and the like. He should not, however, fail to call attention to that group who learn and dispense every new preparation placed on the market.

I have been very much interested in watching the somersaults that many of our young men exhibit in the early years of their practice. It is possible in many instances to determine the schools from which some of our internes come by their attitude toward medical therapeutics; some stick so closely to the old cut-and-dried remedies that they sometimes fail to take full advantage of many of the more modern methods or drugs, while others are veritable therapeutic encyclopedias.

Experience is a wonderful teacher, and failure to profit by it often spells defeat in medical practice, as in other walks in life.

I think the advice which any of the older successful men in the profession would give to the younger men is to be always observant in the use of drugs or other means of therapy: stick closely to those whose merit



is thoroughly proved; do not be anxious to be the first to experiment with new remedies, nor the last to cast off useless ones; try only those highly recommended by men of experience and high standing, and do not always fall for the high-pressure salesmanship of representatives of pharmaceutical houses. Do not, on the other hand, become so prejudiced against their preparations that you cannot recognize the skill with which many are compounded, and the fact that most of our newer worthwhile preparations are the result of the combined efforts of the successful discoverer of new remedies and the wonderful facilities for their manufacture in the pharmaceutical houses.

✽

D. E. SMITH, M.D. (Medical Arts Building, Salt Lake City, Utah).—Doctor Stobbe is to be congratulated, I think, and he certainly speaks the truth when he says, "The general indifference of the scientific (supposedly) modern physician has allowed inroads to be made into his practice."

It is true that many physicians cannot see beyond the surgical possibility of a patient's troubles, and too often a patient is left to his troubles because the doctor cannot find any immediate reason for surgical interference.

I am not wholly in accord with the idea that we should adopt the methods of the quacks or any of the cults, and I am sure that Doctor Stobbe does not intend to convey the idea that we should, but rather to treat our patients whole-heartedly, with the consciousness that they are humans and can understand, at least to a much greater degree than we are wont to assign to them, what we are considering. Too often a patient will come to us and say, "I used to go to Doctor Blank, but he never tells us anything; he thinks I am to do just as he tells me to without any question." As a result, they will go to the one who will take a little more time and explain conditions to them.

May I also join with Doctor Stobbe in his effort to rouse the physician from his medical lethargy and try to instill a better desire for medical thinking, otherwise there is likely to be a continued general decline in medical therapeutics.

Let us all delight in the thought that we are physicians for the body of man, which includes spirit, body, mind, and soul.

✽

O. J. LABARGE, M.D. (305 Medical Arts Building, Salt Lake City, Utah).—Amidst the multiplicity of current papers on the subjects of the etiology, pathology, diagnosis and treatment of varying diverse clinical entities, this paper strikes a keynote in its emphasis upon the necessity for the employment of a carefully prepared plan of treatment adapted to the individual patient and making use of every pertinent therapeutic procedure at our command. Such a plan of treatment must endeavor to relieve, as far as possible, the disagreeable symptomatology which causes the patient to consult a physician; and in every plan of treatment the judicious use of drug therapy will impress the patient with the desire of the physician to alleviate the distressing manifestations of disease. The confidence of the patient in his physician is maintained by therapy of this type, even though the pathological condition present may be chronic and incurable. H. R. Chester has well remarked that "the patient comes to the physician for advice, consolation, and hope. If you give him none of these, you may be an excellent diagnostician and prognosticator, but you are no physician." During the present period of economic distress every practicing physician has been forced to deal with many complaints based upon the factors of anxiety, fear, and economic insecurity. The sedative group of drugs have been of incalculable value in the treatment of this group of patients, and the problem of the care of these patients has again focused our attention upon the advantages of judicious drug therapy.

The self-confident, adequately trained physician of good personality provides a rallying point for the shaken morale of the individual patient, and the possession of a well balanced therapeutic armamentarium is the greatest factor in providing the physician with a fund of confidence in his own judgment and ability. Prompt therapeutic relief of a distressing symptomatology establishes an unshakable foundation of trust and confidence which is of value to both the patient and the physician. The comment of C. F. Martin that "the wisest psychology will never replace quinin and mercury in the cure of certain diseases, nor can it obviate the necessity of operative procedure for a perforated appendix" is a most convincing argument against the theory of "therapeutic nihilism," and should encourage the profession in a resolve to adequately treat every patient with all of the facilities at our command. The failure of the attending physician to provide adequate therapy is often an invitation for well-meaning friends and relatives of the patient to institute treatment (often of a harmful character) of their own, and also often results in the patient listening to the advice of the ignorant and unprincipled. Osler's statement that "in all things relating to disease, credulity remains a permanent fact, uninfluenced by civilization or education," should be a spur to the individual physician in the matter of providing an adequate and satisfying system of therapy for each individual patient. Such a system will maintain the confidence of the patient in his physician, and close every portal of entry to the adventurer and the charlatan as well as provide an effective counterbalance to the incentive for self-medication. In every field of scientific endeavor mysticism is receding before the rising standard of education. Many well-informed lay individuals know more about the practice of medicine today than did our medical predecessors of a century ago. If full information concerning the character of an illness would not be to the best interest of the patient, a thorough discussion of the entire problem with an intelligent member of the immediate family will often prove of immeasurable value to the physician and assist him materially in the proper handling of the case. We must discuss the pertinent problems of diagnosis and treatment with our intelligent patients (or their families) if we are to merit and retain the confidence of our constituencies. Doctor Stobbe has sounded an emphatic warning note in this most appropriate and timely contribution.

## COMPULSORY HEALTH INSURANCE

By FREDERICK L. HOFFMAN, LL.D.  
Philadelphia, Pa.

### IX

ADVOCATES of social insurance for this country, or for any one of its separate States, never fail to betray a colossal ignorance of the workings of the system in foreign countries which have adopted it. Thus the statement that every civilized country except the United States has adopted social insurance is grossly misleading. Canada, for example, has not done so, and neither has a single one of the great South American Republics. Australia has not done so, neither has South Africa. In all these countries strenuous efforts are under way to bring about its adoption

\* One of a series of articles on compulsory sickness insurance written for CALIFORNIA AND WESTERN MEDICINE by the well-known consulting statistician, Frederick L. Hoffman, LL.D. Articles in this series were printed in previous issues as follows: I, in April, page 245; II, in May, page 361; III, in June, page 411; IV, in July, page 33; V, in August, page 114; VI, in September, page 177; VII, in October, page 262; VIII, in November, page 323.

on the basis of alleged benefits, all of which are more or less questionable.\*

#### HOW CASH BENEFITS INFLUENCE POLITICAL POLICY

Equally mistaken is the statement that none of the countries having established social insurance has abandoned the system after years of trial. That is partly true, but the reason is not because of its inherent merits, but because only a political revolution could do away with a system which confers substantial monetary benefits upon the electorate who have only in part contributed to it. Cash benefits are the main factor appealing for public support, with medical benefits only as a secondary consideration. Hence the arguments of Mr. Chester Rowell and others in favor of the adoption of social insurance in California are entirely without merit, and not supported by evidence gathered by impartial methods of competent inquiry.

#### SOCIAL INSURANCE A FACTOR IN PRODUCTION COSTS OF A NATION

Any state which adopts social insurance places itself at a disadvantage with every other State with which it is in interstate competition. In its last analysis all social insurance implies an additional burden on the cost of production, with the major portion of the cost paid for by the employer and the taxpayer. It ought to be clearly recognized that compulsory health insurance draws directly on a measurable proportion of the wage-earners' income, to be expended by the State. It was on this ground that the late Samuel Gompers, in season and out, opposed compulsory health insurance as adverse to the best interests of organized labor, believing as he did that labor was entitled to a wage sufficient to maintain the American standard of living which was and is higher than that of any other country in the world. Mr. Gompers believed that the wage earned should be sufficient both to pay for medical attention and to provide a sum sufficient to meet the needs of old age.

#### COMMENT ON SIR HENRY BRACKENBURY'S CONCLUSIONS

A most important contribution to health insurance literature is an article on health insurance in England by Sir Henry Brackenbury, contributed to the *New England Journal of Medicine* of April 19, 1934. Sir Henry, one of the most influential physicians in English public life, is an outstanding authority on the subject, but his statements are those of a special pleader and must be accepted with reserve. Every physician in England knows full well that health insurance in England has come to stay, and cannot be done away with in view of its political aspects.

In the article Sir Henry reviews the twenty-one years of actual experience of giving and receiving medical advice and treatment in Great Britain

under a system of compulsory and contributory health insurance. He points out that the system is limited to all persons employed at manual labor, and all other employed persons with annual incomes of less than £250 are legally required to insure under the Act, these employees paying themselves approximately 40 per cent of the total cost, the employers paying about the same amount, and the State paying the remaining fifth. Over fifteen million persons are insured under the law, and about fifteen thousand physicians have elected to serve them under its provisions.<sup>†</sup> Most of these physicians, however, also continue private practice. He emphasizes the conclusion that "born of intimate experience, it is acknowledged that any suggestion of the abolition of the scheme would be received by an overwhelming and emphatic protest from the profession and insured population alike." This conclusion is open to question, for there is no evidence in support of it. Resolutions one way or the other are of small value. A thorough and critical examination of the status of panel physicians on the one hand, and the value of panel practice on the other, has not been made. The same conclusion applies to the effect of national health insurance on national health, as to which the evidence is quite unsatisfactory.

Sir Henry calls attention to certain conclusions of the British Medical Association presented to the Royal Commission on National Health Insurance a few years ago, enumerated as follows:

"(a) Large numbers, indeed whole classes, of persons are now receiving a real medical attention which they formerly did not receive at all; (b) the number of practitioners in proportion to the population in densely populated areas has increased; (c) the amount and character of the medical attention given is immensely superior to that formerly given in the great majority of clubs; (d) illness is now coming under skilled observation and treatment at an earlier stage than was formerly the case; (e) the work of practitioners has been given a bias towards prevention that was formerly not so marked; (f) clinical records are being provided which may be made of great service in relation to public health and medical research; (g) co-operation among practitioners is being encouraged to an increasing degree; (h) there is now a more marked recognition than formerly of the collective responsibility of the profession to the community in respect of all health matters.

"These are described as 'immense gains,' and further experience has not tended to minimize the value of any of them. The only qualification perhaps required is that, except in a few instances, the authorities have failed to make proper use of the potential value of the clinical records made by practitioners. It may be added that in a number of rural areas it has been found possible to maintain medical attention in places which would otherwise have been left derelict."

But none of these conclusions are supported by satisfactory evidence. It is unquestionably true, however, that the old Club practice was atrocious, and that it has been replaced by a better system; but this has no parallel in this country. Whether medical attention under the panel system, as now being given, is satisfactory has not been proved.

\* It, of course, is possible that one or more of these countries has adopted new legislation within very recent periods, which has not as yet come to my attention.

<sup>†</sup> According to the report of Sir George Newman, chief medical officer, British Ministry of Health, London, 1934, the number of insured persons entitled to benefits of insured medical service in England and Wales is 16,071,000, while the number of insurance practitioners is 16,500.

Those who receive it are helpless and as a rule, no doubt, are satisfied with what is given, more or less free of charge. It goes without saying that every panel physician in England may be conscientious, but he suffers from the mechanical limitations of a large practice which precludes adequate attention to individual cases. Such instances of treatment as I have observed myself by personal investigation in England satisfied me that much of the treatment is entirely superficial, and that the therapeutics are mostly palliative rather than curative.

#### PANEL CLINICAL RECORDS OF LITTLE USE FOR TREATMENT OR RESEARCH PURPOSES

The statement that clinical records are provided which may be of great service in relation to public health and medical research is important, but to my knowledge no use has been made of this knowledge to any extent for treatment or research purposes. The average diagnosis under the panel system is entirely too superficial to justify its use for scientific purposes. Other observations likewise are unsubstantiated by definite acceptable evidence. Everyone, of course, has a right to his opinion in such matters; but, after all, opinion remains opinion, no matter what authority is back of it.

#### PHYSICIANS WHO FARE BETTER UNDER PANEL PRACTICE

Unquestionably, many poorly equipped physicians have fared better under the panel system than if they were in free competition, but the interests of the better element have been sacrificed for the advantages gained by the inferior type of practitioner. The editorial admits that there are certain drawbacks, particularly the multiplicity of rules and regulations, which to master must impose a tremendous amount of stress and strain on the British practitioner. Sir Henry Brackenbury admits that "there is a tendency to multiply and complicate rules unnecessarily, but in general it may be said that they do not trouble the practitioner much more than the ordinary requirements of the penal code trouble the law-abiding citizens." That, of course, is a mere guess. Conscientious physicians are anxious to avoid conflict with statutory requirements, and the outlook of such difficulties must impair his strictly medical interest in the patient.

#### AN UNWARRANTED CRITICISM OF AMERICAN MEDICAL ASSOCIATION POLICY BY THE LONDON "LANCET"

In an editorial in the London *Lancet* of June 2, 1934, fault is found with the attitude of the American Medical Association, which at its annual meeting on June 11 would consider the question of introducing some form of compulsory health insurance into the United States, having previously been strongly opposed to health insurance as being a form of socialized medicine; it being claimed that "there are now unmistakable signs that the rank and file of the profession are dissatisfied with this way of dealing with so important an issue." The writer of the editorial finds

fault with the report of the Economics Bureau of the American Medical Association which concerns itself chiefly with the German experience in preference to the British, which is most applicable to this country. It is held that "it is by an open-minded study of the British system that an inquirer may most readily appreciate the issues involved in the introduction of compulsory health insurance; and it is surprising that the American Medical Association, in a document prepared to furnish the facts, have dealt so inadequately with what the British doctors have done to place insurance practice on a satisfactory basis." This again is mere opinion, since no evidence is provided from any source showing that the method, on the whole, is really satisfactory to most of the doctors concerned, on the one hand, and to the patients concerned on the other. The editorial expresses the hope that the American Medical Association will give some attention to what has been done in Great Britain to bring insurance practice into harmony with the true traditions of the medical profession. It is, however, my deliberate opinion that this has not been achieved in England, and also that it has not been achieved in Germany.

The final conclusion that "our insurance system was not imposed upon us by a dictator, but freely accepted as a valuable measure of social reform," is inconsistent with the historical facts of the situation. Mr. Lloyd George forced his measure through the British Parliament in bitter opposition to the medical profession and languid interest of the public.

#### THE AMERICAN MEDICAL ASSOCIATION BUREAU OF MEDICAL ECONOMICS REPORT A VALUABLE CONTRIBUTION

The editorial does scant justice to what is unquestionably one of the most valuable contributions to the literature of health insurance. The original report was published in the American Medical Association Bulletin of April, 1934, and covers the entire issue of about thirty pages. Copies of this report may be had by application to Dr. Olin West, Secretary, American Medical Association, 535 North Dearborn Street, Chicago. The report is the work of the Bureau of Medical Economics of the Association, and is thoroughly well fortified by recent data on every aspect of the subject.

It is observed at the outset of the report that "One of the most striking conclusions that arises from any comparative historical study of sickness insurance systems is their highly experimental character." The numerous changes introduced from time to time make it difficult to present results in concrete form. For example, the German code of sickness insurance covers three thousand sections, independent of countless rules and regulations that bear upon the more important aspects of the problem. In a future issue I hope to review this report in detail, limiting myself on this occasion to a few significant statements. It is said, for example, that



"The most severe criticism of medical service under insurance is not based on the occasional examples of overworked practitioners, with resultant hasty careless diagnosis and treatment, but rather on the atmosphere of suspicion and antagonism, which destroys the very foundations of good service. Payment into a general fund over which the insured has no control (and from which he can get back his money, to which, rightly or wrongly, he believes he is entitled) only by being sick, creates the condition described."

That statement goes to the root of the situation, which is thoroughly unwholesome as regards both the patient and the physician. Since the main objective of health insurance is to provide cash benefits to the insured, he is much more interested in that than in medical treatment. Likewise the insured are entitled to treatment for every trifling ailment which constitute the vast majority of cases treated.<sup>‡</sup> Conditions differ, of course, in the various countries and decidedly so concerning matters of medical benefits, which are probably better administered in England, France, and Scandinavia than in Germany and Austria.

#### MERE IMITATION OF BRITISH OR OTHER SYSTEMS NOT INDICATED

There is no more reason why we should follow the British, or any other precedent, in the matter of health insurance than that we should become a member of the League of Nations simply because most of the other nations have associated themselves with that organization. We should zealously guard against the menace of foreign propaganda which is particularly interested in equalizing economic advantages by increasing the burdens of the public in this country to the same point as they press upon the taxpayers of foreign countries. Foreign propaganda had its inception in an elaborate exhibit made by Germany at the Paris Exposition in 1900 and repeated at the St. Louis Exposition in 1904. Germany, in season and out, has encouraged other countries to adopt the same system to bring about an equalization of the cost of production suffering from the burdens of health insurance without equivalent economic advantages. The propaganda is insidious, and is carried forward in this country chiefly by an irresponsible organization in New York City which provides much of the literary material for its advocacy.

#### SOCIAL SERVICE WORKERS NOT ALWAYS ANIMATED BY ALTRUISM

Social service workers naturally favor health insurance as providing opportunities for employment on the part of college graduates in social science who can find no place in the established economic system. During the depression we have countenanced countless social and economic ex-

periments for which future generations will have to pay for many years to come. In a frantic effort to offset the results of the economic errors of the past, we are committing greater political errors at the present time in ignorance of economic laws and often of ordinary common sense.

#### AMERICA NEEDS MUCH OF THE PRESENT ORGANIZATION OF SCIENTIFIC MEDICINE

The disorganization of the medical profession, the standardization of ill-conceived principles and the regimentation of an army of State employees, foreshadow inconceivable disaster to one of the fairest products of the human mind. Medicine ministers effectively to the needs of millions, adapting itself with reasonable success to widely varying conditions. Year after year the profession has made progress, and was never rated as high as it is at the present time. This has been possible only under a system of free competition by which each patient seeks his own doctor and makes his own bargain as to the compensation for services rendered. Wealthy as we are, we are not rich enough to provide for a perfect medical service to one and all at moderate expense. Left alone, the medical profession can be relied upon to adopt methods and means whereby the social benefits of medicine will be increased gradually to the advantage of all concerned.

## THE LURE OF MEDICAL HISTORY\*

### MEDICAL LIBRARIES†

By MILDRED S. FARROW  
San Diego

#### I

**M**EDICAL LIBRARIES are as old as medicine itself. The first medical records were written on the tablets of the memory of ancient physicians, and with the death of each a library perished.

#### MEDICAL LITERATURE IN THE DAYS OF GRAPHIC ART

Six thousand years ago, when graphic art first appeared in India, among the earliest facts to be recorded were those of medicine. The Ayur Veda, written in the Sanscrit of the ancient Hindus, recites the earliest story of disease. In Egypt the tombs of the dead once served in lieu of medical libraries. Here were filed away, and preserved, the records of disease in the well-embalmed bodies of an ancient people.

The archeologists are able today, with the aid of science, to delve into the cause of death and

<sup>‡</sup>The annual report of the chief medical officer, Ministry of Health, 1933, contains a table giving an analysis of 125,646 insurance cases. Of these, 29,698 were bronchitis, tonsillitis, nasal catarrh, cold, etc.; 14,905, influenza; 13,915, diseases of the digestive system. Only 905 were tuberculosis; 1,589, organic heart disease; 3,854, diseases of the genito-urinary system; and 221 malignant disease. Since cancer is the second cause of death in England and Wales at the present time, it is obvious that panel medical service is chiefly concerned with trivial ailments and not with serious organic diseases of long duration, involving heavy expense for treatment including hospital service.

\*A Twenty-Five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of CALIFORNIA AND WESTERN MEDICINE. The column is one of the regular features of the Miscellany department, and its page number will be found on the front cover.

†From the library of the San Diego County Medical Society.

Read before the Altrusa Club of San Diego, September 12, 1934.

have found evidences of such maladies and injuries as fractures, diseases of the bones, nephritis, arteriosclerosis, appendicitis, pleurisy, and various other pathological conditions.

Numerous medical records were handed down to posterity by written works recorded in the form of papyri, and are to be found today in the various libraries throughout the world.

When our European ancestors were still living in caves and clothed in the skins of wild animals, the Chinese, Persians, Hindus, and Mesopotamians had accumulated a large amount of medical literature and had established a number of well-organized libraries.

#### IN THE DAYS OF ARISTOTLE AND ALEXANDER THE GREAT

In 331 B. C., Aristotle inspired Alexander the Great to establish in Alexandria a great library. This library consisted of about 700,000 volumes and included all of the chief divisions of human knowledge. Medical literature was well represented, and with the aid of this vast collection of medical literature and allied sciences, the great medical school of Alexandria was developed, with its clinics, laboratory, and museum. Here were found many leading men of medicine such as Discordes, the medical botanist; Saramus, the gynecologist, obstetrician, and pediatrician; Galen, the experimental physiologist; and Herophilus, the anatomist.

With the destruction of the library at Alexandria, due to religious fanaticism, learning declined and marked the decay of the culture of those responsible for its destruction.

#### THE SERVICE RENDERED BY THE SARACENS

The Saracens in Bagdad and Cordova helped to preserve the Greek classics for posterity, and there is no doubt that had it not been for this literature, much of the writing of Hippocrates and Galen would have been lost.

With the beginning of the Christian era many of the ancient writings were preserved in the monasteries, and formed the nuclei for later libraries.

At the medical school of Salerno, founded in the eighth century, a great medical library was established, containing the best ideals in medicine derived from the Greeks, Romans, Saracens, and the Jews. This medical literature influenced medical thought and practice for over a thousand years.

#### THE FIRST PRINTED TEXT IN MEDICINE

As time went on, universities multiplied, and with them medical libraries grew in number and in size. A great impetus to the growth of libraries began with the art of printing. The first medical text was printed in 1457 and a number of medical books were put to press in 1467, 1470, 1478, and 1525. Many of these books are today to be found in American medical libraries. The workmanship on these books was excellent, as can be seen from their fine state of preservation. In those days there was not the incentive of quick

profits that is present in our age, and the artisans put forth their very best efforts in their work. This fortunately proved to be of great value to the medical profession in the excellent preservation of ancient medical literature.

After the discovery of America in 1492, public interest began to turn to the New World, and with the military came the clergy, who often served as medical advisers, as well as spiritual guides; and it was not long before universities were founded which included medicine in their curricula, while in their libraries were to be found collections of medical books.

#### THE FIRST MEDICAL SCHOOL IN THE AMERICAS

At Lima, Peru, in 1551 Charles the Fifth established the San Marcos University, the oldest institution of learning on the American Continent. Instruction in those days was largely confined to the arts, theology, medicine, and law, with that of theology occupying a prominent position and the rest, to a more or less degree, being subordinate. As time went on, scientific research began to occupy the attention of scholars, with the result that science was given a greater place in the curriculum.

#### FIRST LIBRARIES IN NORTH AMERICA

In North America, we find that library history began with the settlement of Jamestown, when it was decided to establish a college, and a gift of books was made to the prospective institution; but on account of trouble with the Indians the library failed to materialize.

Farther north, efforts to create a library were more successful. Harvard College was founded in 1636, and years later Reverend John Harvard, by provisions of his will, bequeathed three hundred books to the college. Among other libraries was that of the William and Mary College, commenced in 1692. History informs us that in 1700 the Yale Library had its inception when each member brought a number of books and presented them to that body, laying them on the table with some such words as these: "I give these books for the founding of a college in this colony."

The first strictly medical library in the colonies was that of the Pennsylvania Hospital, organized in 1762, and was started by the gift of a book by Dr. John Fothergill.

#### FIRST MEDICAL SCHOOL LIBRARY IN THE UNITED STATES

The first medical school library in the United States was established at the College of Medicine of the University of Maryland in 1813.

The earliest medical periodicals were the *Medical Repository*, published from 1797 to 1824; the *Philadelphia Medical Museum*, running from 1804 to 1811, and the *Philadelphia Journal of the Medical Sciences*, which was started in 1820. Five years later the title was changed to the *American Journal of the Medical Sciences*, and under this name has continued to the present day.

#### THE LIBRARY OF THE SURGEON-GENERAL OF THE UNITED STATES ARMY

The literature of a science so progressive as that of medicine and its allied subjects loses its value after a very limited period, and hence many of the books have little save an historical interest. For this reason, only a few institutions with the necessary funds and facilities for such preservation undertake to obtain and care for the great mass of medical literature of the past. One library in particular, in the United States, has volunteered to play the part with distinguished success. That one is the library of the Surgeon-General's office of the United States Army, Washington, D. C.

Under the direction of the late Dr. John S. Billings, the largest collection of medical literature in the world has been gathered, classified with a catalogue covering over 905,000 volumes and thousands of pamphlets, and this is a monument of biological research; and this work is being continued by Doctor Billings' successors.

#### SOME AMERICAN MEDICAL LIBRARIES

The majority of medical libraries are connected with medical departments of the various universities and independent medical schools. In the American Medical Directory, 232 American medical libraries are listed, ranging in size from 500 volumes to 905,000 volumes.

The library of the College of Physicians and Surgeons of Philadelphia is credited with 173,021 volumes; Harvard University Medical School Library has 59,524 volumes, and the Medical School Library of Columbia University possesses 58,133 volumes.

Among the various medical society libraries are those of the Medical Society of the County of Kings, Brooklyn, New York, with 131,837 volumes; the New York Academy of Medicine Library of 188,000 volumes, and the Rhode Island Medical Society Library and the Boston Medical Library, with 31,000 volumes and 165,841 volumes, respectively.

Prominent among the notable medical libraries of the Middle West is the Cleveland Medical Library, with 48,000 volumes; the John Crerar Library, Department of Medical Sciences, with 90,000, while in the south is the library of the Medical and Chirurgical Faculty of the State of Maryland, containing 50,000 volumes, and the William H. Welch Medical Library with 110,000 volumes.

#### MEDICAL LIBRARIES ON THE PACIFIC COAST

Farther west on the Pacific Coast, in San Francisco we have the Lane Medical Library with 78,000 volumes, the University of California Medical School Library with 31,600 volumes, and the library of the San Francisco County Medical Society, holding 14,000 volumes.

In Los Angeles, the Los Angeles County Medical Association (formerly the Barlow Medical Library) has a library of 20,000 volumes, and

the University of Southern California Medical School Library offers 6,791 volumes.

The library of the San Diego County Medical Society consists of over 6,000 volumes.

In addition to these libraries are the various county medical society and hospital libraries scattered throughout the State.

#### THE LIBRARY OF THE SAN DIEGO COUNTY MEDICAL SOCIETY

The San Diego medical library was organized in 1915, being housed at that time in a very small room in what was then the Timken Building. Since that time the library has been moved twice, until it now occupies the entire south wing of the top floor of the Medico-Dental Building. The rapid growth of this San Diego medical library was largely due to the untiring efforts of its enthusiastic supporters, who have contributed generously of their time and money, so that from a few volumes it has grown to a library of over 6,000 volumes, eighty-five current medical journals and many bulletins from various parts of the United States, Hawaiian Islands, and Porto Rico.

1410 Medico-Dental Building.

(To be continued)

## CLINICAL NOTES AND CASE REPORTS

### VISCEROPTOSIS

By WILLIAM FITCH CHENEY, M.D.  
San Francisco

THE following case history calls attention to a type of disease not unusual, and yet, apparently, not recognized as often as it should be.

#### REPORT OF CASE

A woman, age forty-six, seen in September, 1934, had suffered from trouble with her digestion for eight or nine years previous. She had a good appetite, but after eating, sometimes immediately, sometimes two or three hours later, she felt too full and became greatly distressed by this sense of distention. There was no severe pain, but a constant, dull ache. Sooner or later she began to belch, and finally, after expelling much gas, obtained relief. Then she was comfortable until she ate again, but trouble recurred promptly as soon as she filled her stomach. Because of this sequence, she had practically starved herself, refraining from food to obtain comfort; and her weight had thus gradually decreased about fifty pounds since the onset of her illness. Two capital operations had been performed to cure her—first, the removal of her gall-bladder, and several years later removal of her appendix, uterus, both tubes and ovaries. Yet these operations had made her no better, but rather worse. Numerous teeth had also been extracted without benefit.

This woman presented a characteristic appearance that suggested at once the diagnosis. Five feet six inches tall, she weighed only 121 pounds. Tall, slender, emaciated, her figure was the typical one of visceroptosis; and when, in addition to her peculiar build, she was found to have a prolapsed and palpable right kidney, and an abdomen more prominent in the lower than in the upper half, the findings became diagnostic.



Gastric analysis showed an abundance of thick mucus in her fasting stomach contents, and in each extraction after a test-meal; and also a very deficient secretion, the total acidity being never above fourteen and the free HCl never above four. X-ray films proved that the stomach was situated low in the abdomen, with the lesser curvature below the level of the iliac crests as the patient stood erect. There was also demonstrated a delay in emptying time.

#### COMMENT

Case records accumulated during a number of years past contain more than a few instances of this sort. The real cause of such symptoms as this patient described appears to be the gastroptosis which interferes with both the motor and secretory functions of the stomach. Some of these cases are congenital, some of them acquired; they occur in either sex, but more often in women than in men; and they may appear at any age. However, the stomach is never the only abdominal organ prolapsed, and gastroptosis forms only one part of a general visceroptosis, frequently associated with neurasthenia, as first described by Glenard in 1885.

The story given of long-standing digestive disturbances, with the symptoms often vague and indefinite and not corresponding to any type of gastric disease; with constipation, lack of energy, poor nutrition and inability to put on weight, ought at least to suggest what is wrong. When, in addition, there is also the evidence obtained by physical examination—the long, slender body, the lack of adequate fat, the prolapsed right kidney and frequently the prominence of the lower abdomen, even when the patient is lying on the back—the impression previously created receives further confirmation. Add to this a gastric analysis showing anomalies of secretion and impairment of motility, but no proof of intrinsic organic disease; and finally, the demonstration by x-ray films of a stomach lying low in the abdomen or even in the pelvis and emptying slowly, and the original conjecture as to diagnosis becomes a certainty, upon which proper treatment can be based.

It is surprising how many of these patients with visceroptosis give in their history an account of operations done by a surgeon for gastric ulcer, cholecystitis or appendicitis to cure their disturbances of digestion; or by a gynecologist, who has removed uterus or ovaries to relieve a chronic backache; or of the fitting of glasses by an eye specialist to prevent further headaches; and all without benefit because the view taken has been too narrow and the condition underlying all these manifestations has not been appreciated. That such errors are made appears to prove the statement at the outset that gastroptosis and visceroptosis are not recognized as often as they should be.

Much good can be accomplished in these cases, however, by non-surgical treatment. This should include a well-fitted corset or belt to give abdominal support; rest in bed or off the feet for at least twelve hours out of the twenty-four; rest lying down for a half-hour after each meal, on the right side, to get the food started on its way

out of the stomach; a soft, non-residue diet; nuxvomica before each meal to stimulate motility; and cascara at bedtime, if constipation forms a part of the picture, as it frequently does. By such measures most patients gradually obtain both comfort and increased usefulness.

After one month's treatment on such a plan, the patient who forms the text for this clinical note reports: "I have no more gas and, by following the diet recommended, everything I eat agrees with me."

210 Post Street.

#### A MEANS OF APPLYING HEAT TO CIRCUMSCRIBED AREAS

By H. H. PARSONS, M. D.  
Grass Valley

A PATIENT recently treated for a staphylococcal otitis externa complained of the bulkiness and weight of a hot-water bottle, claiming that its pressure caused pain. In order to overcome this difficulty, I devised the small reflector described below, which I have found to be very efficient, inexpensive, and easy to construct, and that it delivers the proper amount of heat where it is needed, and not over a broad area.

I took an ordinary "dog food" can, which is three inches in diameter and four and one-half inches long, and cut out one end with a can opener which crimps the cut edge, making a rounded lip to the can. From the center of the other end of the can, I cut out a piece of tin one and one-sixteenth of an inch in diameter, or of a size that would just allow the screw-end of an electric-light bulb to pass through. I then obtained an electric-light socket, with cord and plug attached, and a 15-watt light bulb.

The bulb, put into the can so that its screw-end would project through the small opening, was then screwed into the socket, and the outfit was complete. The can may be covered with any material desired, but this is unnecessary.

For use, the light is turned on, the can placed over the ear so that the end of the can rests against the head, thus making an almost air-tight heating chamber. The heat from a 15-watt light is just right, is easily borne, and the can does not get too hot to handle. A twenty-minute application, four or five times a day, gives remarkable relief and hastens resolution; and there is no pressure made on tender parts.

This reflector may be used for many conditions, such as boils, otitis media, mastoiditis, and breast abscess, and to keep eye-compresses at the proper temperature.

Should the heat become too great, simply lift the reflector off for a few seconds, to correct the temperature.

Different sizes of cans may be used to meet different conditions, and the can may be belted on in places where it would be difficult to hold it with the hand.

128 Neal Street.

## BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An Open Forum for brief discussions of the workaday problems of the bedside doctor. Suggestions of subjects for discussions invited.

### ON OBESITY

#### PATHOGENESIS AND DIAGNOSIS

R. A. KOCHER, M.D. (P. O. Box 926, Carmel). It has been customary to classify obese cases as endogenous and exogenous. I prefer the terms "simple" and "endocrine" obesity. Simple obesity is solely the result of overindulgence in food. Endocrine obesities include a considerable group of cases of glandular dysfunction presenting adiposity as a symptom. However, adiposity is not a necessary accompaniment, and these glandular dystrophies each present their own symptom complex. All cases of obesity are exogenous in the sense that accumulations of stored fat cannot result unless the total calories in the diet exceed the caloric energy produced in the body.

Taking all types of obesity, there is abundant evidence to show that over 50 per cent of the cases present a hereditary tendency. Let us first consider simple obesity, and illustrate the same with a case history.

*Simple Obesity.*—A woman, age fifty-six, housewife (does no work, has two servants); complaint, shortness of breath on exertion, headache, tension in back of the neck (these patients seldom consult a physician for esthetic reasons alone). General health in the past has always been good, has had no serious illness. Menstrual history normal; has had three children, all living and well. Until the age of thirty, her weight was quite constant, at about 115 to 118 pounds. There was then a gradual increase up to the age of fifty, when her weight reached 195 pounds, remaining about the same ever since. She says she has been "comfortably fat" for about twenty years and did not associate her shortness of breath, and headaches, which developed only during the last six months, with her obesity. Heart, transverse type, considerably enlarged in all dimensions, but chiefly to the left; rate 80, no disturbance in rhythm. Blood pressure: systolic 180; diastolic, 110. There is a marked acceleration in heart and respiratory rate after moderate exercise, with delayed return to normal. Fat distribution is fairly even, most marked over abdomen, but with absence of excessive mammary, trochanteric or extremity masses; no supraclavicular pads, nor infiltration areas.

Urine: Specific gravity, 1010; few hyaline casts. Blood count, normal. Basal metabolism, normal.

This patient reported that, while she had a good appetite, she considered herself a light eater. On close questioning, it was learned that she was a connoisseur of food, preferring French cooking; likes gravy, bread, butter, olive oil, heavy soups, pastry and the like. It is apparent from this that while she may have consumed a small bulk, she selected those foods of high caloric content. Water

and cellulose-containing foods, as vegetables and fruits, were not much in evidence in her menu. For exercise, she reports that for years she seldom indulged in anything more strenuous than bridge.

The response shown by such patients to a course of restricted caloric intake is often a diagnostic test as to the presence of any underlying metabolic disturbance. This patient on a caloric intake of 1,000 daily, lost weight at the rate of three to four pounds per week; which I consider the upper limit of safety where such a course of reducing is to be continued over a period of weeks or months. When this patient had lost about twenty pounds in weight, the systolic blood pressure had dropped to 155 to 160, and remained at this level, even though the patient subsequently lost fifteen additional pounds. A similar blood pressure response has been observed in other cases.

This case is presented as more or less typical of simple or overeating obesity. Any physician is familiar with similar cases in his own practice. Of particular significance are the symptoms of distress characteristic of a degenerative process in the cardiorenal system, an almost inevitable accompaniment or penalty of prolonged obesity. "We dig our graves with our forks," as some wag would have it. With advancing years there is a gradual decline in the level of the oxidative processes of the body. With the years there is likewise a decreasing inclination for bodily exercise. With most persons there is a nice adjustment of appetite calling for less food, especially of the richer varieties, which keeps the body weight at a fairly constant level over a period of many years. With others, this unconscious adjustment of appetite to actual food requirement is not so apparent, and there is either a constant battle against the increasing tendency to gain weight or a serene overindulgence in food with a complacent acceptance of the resultant corpulence. Perhaps it is a matter of morals. Joslin, at least, hopes that the time will come when it will be considered immoral to be fat.

By what mechanism obesity, over a period of years, produces pathological degenerative conditions such as diabetes, nephritis, arteriosclerosis, is not clear. Not all cases result in degenerative disease. It may even be argued with some degree of conviction that such degenerative processes, which appear only late in the course of obesity, may have a common origin with the latter in some as yet little understood aberration in cellular metabolism. This is a fascinating field for speculation, but should prove a fruitful field for investigation.

*Obesity with Glandular Disturbance.*—Passing now from simple obesity, let us consider, briefly, those cases accompanied with glandular disturb-

ance. The classical example is hypothyroidism, or myxedema, where the pathologically lowered metabolic rate is probably the chief etiologic agent in the accumulation of fat. Here the response to treatment with thyroid gland, or its derivatives, becomes a strong confirmatory diagnostic agent, not only in the weight response, but in the prompt improvement in many of the other related symptoms of this deficiency disease. Restrictions in diet may or may not be necessary in the correction of weight in these cases. The obesity is only one of the symptoms it is aimed to improve. With the increased metabolism produced by thyroid therapy, caloric restriction of the diet is generally not indicated.

In the remaining types of endocrine obesity, especially in those where there is no accompanying disturbance in thyroid metabolism, the genesis of the glandular dysfunction with respect to the adiposity is not always so apparent. The common types are associated with deficiencies in the gonadal system, and referred to as dystrophia adiposogenitalis, eunuchoidism, pituitary disease, etc.; the polyglandular cases falling under such headings as thyropituitarism, pituitarothyroidism, etc. By no means all of these cases show obesity, or even localized adiposity. The symptomatology is very diverse, and for a full discussion the reader is referred to works such as Engelbach's "Endocrine Medicine." For the purpose of the present discussion, it may suffice to point out the characteristic fat distribution in obese cases of pituitary involvement. The girdle adiposity of adiposogenital pituitarism is a classical example. The peculiar and enormous trochanteric pads of fat in certain of these pituitary obese cases is typical. Since the basal metabolism of the majority of these cases is normal, the treatment as far as the obesity alone is concerned, is dietetic, physiotherapy, exercise, in combination with the indicated glandular therapy.

Anyone having experience with the treatment of obese cases occasionally finds a patient who, in spite of a normal basal metabolism, and though placed on a reduced caloric diet and increased physical activity, fails to lose weight over a considerable period of observation. A certain percentage of such cases will be found, by making a careful check of the water balance, to be retaining fluid in the body, along with the loss of body fat. There remains, however, a certain small minority in which this is not the case. Such cases suggest that there may be some undiscovered disturbance in the chemistry or physiology of energy exchange. It has been suggested that the basal metabolic rate, as generally taken, is not a true index of the twenty-four-hour metabolism. If this is true, a fluxuation, such as a depression of the B. M. R. during sleep, would explain the condition. However, no adequate twenty-four-hour determinations of energy exchange have ever been made in such cases to prove or disprove this point. These cases likewise respond to a reduced caloric intake by a loss in weight, provided the diet is sufficiently restricted. Possibly the use of drugs of the dinitrophenol group should be restricted to obese cases of this type.

#### DANGERS AND TREATMENT

W. D. SANSUM, M. D. (The Sansum Clinic, Santa Barbara).—People would be more interested in maintaining a normal body weight if they could be made to realize the seriousness of overweight. Usually they either ignore the excess weight, or are interested merely in reducing from the standpoint of appearance. This indifferent attitude is maintained until some accident attributable to the overweight occurs. We believe that a frank statement of the dangers of overweight is the most convincing argument in favor of adequate treatment.

#### THE DANGERS OF OBESITY

*The Span of Life Is Shortened by Obesity.*—Prominent life insurance companies have collected comprehensive statistical data which demonstrate the risk of obesity from an insurance point of view. These show that for each pound a person is over- or underweight, the average expectancy of life is decreased by one per cent. For example, a woman forty years of age, five feet six inches tall with shoes, should weigh about 138 pounds dressed. At this weight, her life expectancy would be twenty-eight years, according to actuary tables. If, however, at this age she actually weighs 188 pounds—that is, she is fifty pounds overweight—her life expectancy is reduced to fourteen years. Instead of expecting to live to be sixty-eight, she only can expect to live to be fifty-four years of age.

*The Heart Is Usually Enlarged.*—It is believed that the heart must enlarge to carry on efficiently in the presence of the excess body weight. We have made thousands of measurements, by means of the orthodiagram, of the plane surface of the heart shadow. We have found this enlarged in most obese patients, particularly those whose obesity is of long standing. This enlargement of the shadow, particularly of the transverse diameter, may not mean permanent cardiac damage, because we frequently see it recede after body weight has returned to normal. Although the orthodiagram is the best simple method of estimating cardiac size, it does not give sufficient information regarding the volume of the heart. Further studies with the dialectograph may yield valuable information along this line.

*The Blood Pressure Is Usually Increased.*—Most of our obese patients have had hypertension. Similar to the enlargement of the heart, this condition might be expected from mechanical considerations. Each pound of excess body weight is said to require about one extra mile of small blood vessels. Increased pressure would be necessary to carry blood through this extra network of blood vessels. As the blood pressure rises, further enlargement of the heart is necessary in order to perform the additional work required. Therefore we see the largest hearts in obese patients with elevated blood pressure. In our own series of patients, blood pressure readings have fallen as body weight approached normal, even when the hypertension was not obviously secondary to the obesity. Similar observations upon the association



of overweight and hypertension have been made at the Mayo Clinic.

*Arteriosclerosis Eventually Follows.*—There is considerable evidence that hypertension from any cause is associated with varying degrees of arterio- and arteriolosclerosis.

*Obese Individuals Have a Predisposition to Diabetes Mellitus.*—Obesity is so commonly followed by, or associated with, diabetes that leading authorities consider it to be one of the most important factors in the causation of this serious disease. More than one-half of the adult patients in our own diabetic series have been overweight, have had enlargement of the heart and high blood pressure at the beginning of their treatment.

*Obesity Is a Cause of Lowered Body Resistance.*—It is said that general body resistance is usually lowered in the presence of obesity, so that obese individuals are more susceptible to such common diseases as pneumonia and influenza. The prognosis is more grave in the obese than in the normal persons.

*Obese Patients Are Poor Surgical Risks.*—Cholecystitis, with or without cholelithiasis, occurs more frequently in obese than in normal persons. If surgical intervention becomes necessary, surgeons attempt such operations only with great reluctance when some emergency demands immediate operation.

#### TREATMENT

Authorities believe that overweight in adults is usually preceded by overeating and underexercising. Dysfunction of the glands of internal secretion probably plays a rôle, the exact nature of which is not yet fully understood. We use thyroid by mouth when the basal metabolic rate is low, carefully watching the clinical symptoms and doing repeated basal metabolic rates. Regardless of the type of obesity, exercise and diet form the two most important factors in its treatment. Weight should not be lost too rapidly. We do not advise a loss of more than ten pounds per month, and in some instances even a slower rate of loss is advisable.

*Exercise.*—The amount and type of exercise will depend upon the individual patient's general physical condition. Exercise should be prescribed only after a careful physical examination of the patient, because of the frequency of heart, blood vessel, and kidney complications in obese individuals. In the presence of heart failure, or impending heart failure, patients should be kept in bed. Massage and bed exercises are valuable in such cases to maintain normal muscle tone. Walking is not only one of the cheapest, but also one of the best forms of exercise. Patients usually know how far they can walk without undue fatigue. The distance walked each day should be increased gradually. Golf, horseback riding, tennis and swimming are entertaining types of outdoor exercise. Supervised gymnasium exercises, associated with reducing massage, are valuable if the patient can afford the extra attention. Some cases require orthopedic adjustments before walking or other exercises should be undertaken.

*Diet.*—The diet should be carefully planned in order not to violate any of the accepted principles of nutrition. It should contain an adequate amount of protein, carbohydrate, minerals, vitamins, and residue. The number of calories allowed per day will vary with individual needs, and will usually range from 800 to 1,200. This is intentionally planned to be below basal requirements of the patient.

The quantity of protein should be at least a gram per kilogram of the average between ideal and present weight. We rarely use less than 75 grams of protein per day, and often as much as 90 to 100 grams. These higher protein diets satisfy the appetite, have a greater specific dynamic action, and are more apt to keep the patient in nitrogen balance. The protein can be obtained from skim milk, cottage cheese, eggs, lean meat, fish, and fowl.

The diet should contain as much carbohydrate as it is possible to include within the caloric requirements. It is believed that a liberal amount of carbohydrate in the diet assists in the burning of body fat. Carbohydrate can be obtained from the low percentage fruits and vegetables, and milk.

A liberal quantity and variety of vitamins are assured by generous servings of the low percentage fruits and vegetables. A small amount of butter or cream is usually included in order to provide some of the valuable fat-soluble vitamins. The milk and eggs also supply some vitamins.

Mineral elements are supplied mainly by the milk, fruits, and vegetables; but we sometimes add such mineral substances as calcium and iron.

A liberal use of the lower percentage fruits and vegetables provides the necessary residue or bulk, facilitating adequate elimination.

The following diets and sample menus, arranged by our dietitian, Miss Ruth Bowden, illustrate the type of diets used in this clinic. Patients are advised to weigh their food whenever possible, otherwise approximate measures are used. Every diet is arranged to meet individual requirements, but in general they range from 800 to 1,200 calories daily.

#### FOODS ALLOWED:

*Soup*—Clear broth and vegetable soup, without rice or barley.

*Meat*—Lean meat (all kinds except fresh pork), fish and fowl (except goose).

*Egg*—One daily prepared without fat.

*Milk and Milk Products*—Skim milk, buttermilk, cottage cheese, and small quantity of butter or cream.

*Vegetables*—Asparagus, beet greens, broccoli, Brussels sprouts, celery, chard, chicory, endive, lettuce, mushrooms, mustard, rhubarb, spinach, summer squash, turnip greens and watercress; cauliflower, cucumbers, kohlrabi, radishes, string beans and tomatoes; French artichoke, chayote, cabbage, eggplant, leeks, okra, green onions, green peppers, pumpkin, rutabagas, winter squash and turnips; beets, carrots, celery root, onions and oyster plant; parsnips and peas.

*Fruits*—(fresh, dried or waterpacked)—Blackberries, cranberries, gooseberries, guavas, limes, loquats, melons and strawberries; apples, grapefruit, huckleberries, lemons, loganberries, mulberries, oranges, papayas, peaches, pears, plums and raspberries; apricots, cherries, nectarines, pineapple and pomegranates.

*Cereals and Cereal Products*—Small quantity of bread—one to two slices daily.

*Beverages*—Clear coffee or tea, skim milk, buttermilk and tomato juice.

*Miscellaneous*—Saccharine, saxon, gelatine, mineral oil salad dressings and cooked dressings without oil or butter.

## FOODS NOT ALLOWED:

**Soup**—Cream soup and any rich soup.  
**Meat**—Fresh pork, goose and all fat meats.  
**Milk and Milk Products**—Whole milk, cheese except cottage cheese, cream and butter except small quantity.  
**Vegetables**—Potatoes, corn, sweet potatoes, lima beans and all dried beans.  
**Fruits**—Crabapple, figs, grapes, mangos, persimmons, prunes, bananas, grape juice, all fruits canned with sugar, dried raisins, dates and figs.  
**Cereals and Cereal Products**—All (including hominy, spaghetti, rice, macaroni, etc.) except the small quantity of bread allowed.  
**Concentrated Sweets and Starches**—Sugar, jelly, jam, honey, candy, dried raisins, dates, desserts, pastry, cake, ice cream, cornstarch, tapioca, sago, etc.  
**Beverages**—Whole milk, all sweet beverages and alcoholic beverages.  
**Miscellaneous**—Avocado, chocolate, nuts, peanut butter, olives, lard, lard substitutes, bacon fat, gravies, and all salad dressings, except mineral oil and cooked dressing without oil or butter.

## 800 CALORIE DIET (approximately 80 grams protein):

**Breakfast**

Fruit (without sugar) average serving (4 ounces).  
 Egg one or crisp bacon, three slices, or lean ham, one small slice (one ounce).  
 Bread, one-half slice.  
 Butter, one-half square.  
 Hot beverage (clear).

**Luncheon**

Cottage cheese, two ounces, or lean meat, fish or fowl, two ounces.  
 Vegetables, two or three servings.  
 Fruit (without sugar), average serving (four ounces).  
 Skim milk or buttermilk, one-half pint.

**Dinner**

Clear broth, tomato juice or vegetable soup.  
 Lean meat, fish or fowl, two ounces.  
 Vegetables, two or three servings.  
 Fruit (without sugar) average serving (four ounces).  
 Skim milk or buttermilk, one-half pint.

## 1000 CALORIE DIET (approximately 85 grams protein):

**Breakfast**

Fruit juice (orange or grapefruit), one glass.  
 Fruit (without sugar), one serving (five ounces).  
 Egg one or crisp bacon, three slices or lean ham, one small slice (one ounce).  
 Bread, one slice.  
 Butter, one-half square.  
 Hot beverage (clear).

**Luncheon**

Cottage cheese, two and one-half ounces or lean meat, fish or fowl, two and one-half ounces.  
 Vegetables, two or three servings.  
 Fruit (without sugar), one serving (five ounces).  
 Skim milk or buttermilk, one-half pint.

**Dinner**

Clear broth, tomato juice or vegetable soup.  
 Lean meat, fish or fowl, two and one-half ounces.  
 Vegetables, two or three servings.  
 Fruit (without sugar), one serving (five ounces).  
 Skim milk or buttermilk, one-half pint.

## SAMPLE MENU

**Breakfast**

Sliced oranges, one medium orange.  
 Poached egg, one.  
 Toast, one-half slice.  
 Butter, one-half square.  
 Coffee (clear).

**Luncheon**

Cottage cheese, two heaping tablespoonfuls.  
 Combination vegetable salad (lettuce, tomatoes, cucumbers, asparagus and green pepper).  
 Mineral oil dressing.  
 Baked apple, one medium.  
 Skim milk, one glass.

**Dinner**

Consommé.  
 Lean roast beef, small slice (two ounces).  
 Brussels sprouts, three or four.  
 Banana squash, three tablespoonfuls.  
 Lettuce salad.  
 Mineral oil, French dressing.  
 Pineapple (fresh or water-packed).  
 Skim milk, one glass.

## SAMPLE MENU

**Breakfast**

Orange juice, one glass.  
 Applesauce, one large dish (five ounces).  
 Crisp bacon, three slices.  
 Toast, one slice.  
 Butter, one-half square.  
 Coffee (clear).

**Luncheon**

Cold roast beef, two and one-half ounces.  
 Spinach, three tablespoonfuls.  
 Stewed tomatoes, three tablespoonfuls.  
 Artichoke, one medium.  
 Mineral oil mayonnaise.  
 Fresh pear, one large.  
 Buttermilk, one glass.

**Dinner**

Tomato juice, one glass.  
 Baked halibut, two and one-half ounces.  
 Italian squash, three tablespoonfuls.  
 Cauliflower, three tablespoonfuls.  
 Grapefruit sections, one grapefruit.  
 Skim milk, one glass.

## 1200 CALORIE DIET (approximately 95 grams protein):

**Breakfast**

Fruit juice (orange or grapefruit), one glass.  
 Fruit (without sugar), one serving (five ounces).  
 Egg, one, or crisp bacon, three slices, or lean ham, one ounce.  
 Bread, one slice.  
 Butter, one-half square.  
 Hot beverage (clear).

**Luncheon**

Cottage cheese, three ounces, or lean meat, fish or fowl, three ounces.  
 Vegetables, two or three servings.  
 Fruit (without sugar), one serving (five ounces).  
 Bread, one-half slice.  
 Butter, one-half square.  
 Skim milk or buttermilk, one-half pint.

**Dinner**

Clear broth, tomato juice or vegetable soup.  
 Lean meat, fish or fowl, three ounces.  
 Vegetables, two or three servings.  
 Fruit (without sugar), one serving (five ounces).  
 Bread, one-half slice.  
 Butter, one-half square.  
 Skim milk or buttermilk, one-half pint.

## SAMPLE MENU

**Breakfast**

Grapefruit juice, one glass.  
 Apricot (fresh, dried or waterpacked), one large dish (five ounces).  
 Lean ham, one ounce.  
 Toast, one slice.  
 Butter, one-half square.  
 Coffee (clear).

**Luncheon**

Crab salad (crab, three ounces, lettuce, tomato, celery and cucumber).  
 Mineral oil mayonnaise.  
 Raw apple.  
 Crackers, two.  
 Butter, one-half square.  
 Skim milk, one glass.

**Dinner**

Vegetable soup.  
 Boiled tongue, three ounces.  
 Spinach, three tablespoonfuls.  
 Diced beets, three tablespoonfuls.  
 Fresh celery, three stalks.  
 Sliced oranges, one large orange.  
 Skim milk, one glass.

NOTE: Vegetables to be served without butter or cream.

Salads to be served with lemon, vinegar or mineral oil dressing.

Saccharine or saxin may be used for sweetening.

\* \* \*

## ENDOCRINE ASPECTS

H. LISSER, M. D. (Fitzhugh Building, San Francisco).—Endocrine obesity is a controversial subject. Everyone is agreed that there is such a thing as ductless gland adiposity; dissension concerns its frequency, its character, and the indications for glandular therapy.

Considerations of brevity permit but bold, blunt outlines crudely sketched; no time is left for argumentative or interpretative shading. In fairness, this must be borne in mind when appraising the terse statements which follow.

1. *Myxedema and milder forms of hypothyroidism* are usually accompanied by a moderate degree of obesity, some of which is "water-logging." Administration of thyroid substance to such individuals is indicated and perfectly safe when properly supervised. The weight reduction consists chiefly of fluid loss and dissipation of myxedematous deposits. Such patients are rarely more than fifty pounds overweight.

2. *Persons who are seventy-five or more than one hundred pounds overweight* have something else the matter with them, and usually we cannot find out what this is. A few of them are gluttons: most of them are not. Ordinary low caloric diets of 1,000 to 1,500 calories daily fail to reduce them much, if any. Severely subcaloric diets of the Evans type (300 to 600 calories) are necessary for adequate weight loss.

3. *The basal metabolic rate* in obese persons is not, by itself, an indication for or against the use of thyroid substance. It can be used safely and

effectually in patients whose basal rates are normal, and it can be futile or harmful in patients whose low basal rates are not due to hypothyroidism. In the last analysis the final test of a diagnosis of hypothyroidism is the response of the patient to thyroid administration. This is specific.<sup>1</sup>

4. Animated controversy continues concerning the merits, demerits, futility or danger of utilizing thyroid substance in the treatment of *non-thyroid obesity*. It is probably only fair to state that the most respected opinion denounces its use for this purpose. But the writer is quick to add, quite frankly, that he has employed this valuable adjunct to a proper reducing régime for over fifteen years in a truly large number of patients, and expects to continue doing so. Its dangers have been grossly exaggerated. Indeed, the propaganda of fear concerning it has been so widespread and intense that a large percentage of not only the laity, but also the medical profession itself, has become so frightened and panicky that much time is lost in trying to persuade patients, and especially their families and medical advisers, to give this preparation a trial. Most certainly, thyroid can do serious harm, when prescribed to the wrong person, for the wrong condition, or to excess. But so can digitalis, quinidin, insulin, salvarsan, massage, psycho-analysis or surgery, or any other truly potent therapeutic procedure. Only impotent measures are harmless. The purchase of thyroid substance, or preparations containing it, by the laity, without prescription, and without proper medical supervision, should be prohibited by law. But that any properly trained physician should be afraid of it is tantamount to admitting that he is not properly trained; for it is one of the easiest drugs to control, both by clinical observation and laboratory checks. Symptoms and signs of thyroid overdosage are by no means vague or elusive.

5. It has long been known that *castration* is usually followed by more or less obesity. Indeed, this is deliberately practiced in animal husbandry to prepare fatter, sweeter meat for market. Women ordinarily gain weight after the *menopause*; some do not; why, we do not know. It is reasonable to assume that *gonadal deficiency* in male and female may at times be associated with varying degrees of corpulence; but at present such endocrinopathies are difficult to diagnose with certainty. Moreover, treatment with corresponding glandular extracts, namely, the male or female sex hormones, does not reduce such adiposity specifically. Possibly there exist as yet undiscovered sex hormones which influence metabolism; comparable to the recently postulated metabolic hormone from the adenohypophysis. Or maybe the eunuch and eunuchoid becomes obese because of a secondary deficiency of some other ductless gland, as the thyroid, pituitary, or adrenal.

6. Although obesity is common in *diabetes mellitus*, and has been abundantly stressed as a po-

tential precursor of insulinary deficiency, diabetes is actually uncommon in the huge population of obese persons. Moreover, insulin has no reducing powers and, in fact, is utilized for fattening purposes in undernourished individuals.

7. *Adrenal cortical* tumors are relatively uncommon. The syndromes "genitosurrenale" caused by them, especially the pseudosexual-precocity of little girls and the virilism of adult females, are ordinarily associated with obesity, sometimes of immense proportions. It is conceivable that cortical hyperplasia without tumor can produce similar abnormalities. The fat is distributed in a manner resembling the obesity which characterizes Cushing's hyperpituitary basophilism, in the hips, buttocks, abdomen, breasts, thighs, and upper arms; the forearms and legs being singularly free from fat accumulation. Some investigators, notably Goldzieher, claim to have isolated a specific principle from the adrenal cortex which influences fat metabolism. He and associates<sup>2</sup> report the removal of one hyperplastic adrenal three times normal size from a 23-year-old woman who weighed 335 pounds, and who had failed to lose by thyroid and dietary measures. No dietary restrictions were utilized after the operation, and in one year thereafter she lost 145 pounds.

8. The numerous and highly significant investigations of the last twelve years concerning the functions of the *anterior and posterior hypophysis* have by no means settled the disputed relation of the pituitary body to fat metabolism. Camus and Roussy, in 1921, "showed that the adiposities with which pituitary ablation had been so often accompanied could be produced by slight injuries to the superficial gray of the tuber cinereum near the hypophysis, but with the hypophysis itself perfectly intact." This has been confirmed by others. So-called hypophyseal obesity had to be moved next door into the hypothalamus. But in 1931,<sup>3</sup> Anselmino and Hoffman reported the occurrence of a substance in the anterior lobe, separable from the growth, gonadotropic, thyrotropic and lactogenic hormones, which causes a rise of the acetone bodies in the blood. It occurs in the blood stream, and has been isolated from the urine. It appears in the blood only when fat is burned.

This discovery, together with the recently postulated syndrome by Cushing of pituitary basophilism in which a rapidly acquired, peculiarly distributed plethoric and sometimes painful obesity is a highly characteristic phenomena, suggests that a pituitary responsibility for certain forms of obesity merits further consideration.

Meanwhile, the majority of clinicians who have attempted to influence weight reduction by the oral or hypodermic administration of anterior, pituitary or "whole" pituitary products, consider such therapy useless. A few hold otherwise, but have not provided acceptable proof of their contentions. No doubt this will be settled eventually.

<sup>1</sup> Lissner, H.: The Clinical Indications for, and the Proper Use of Thyroid Substance, International Clinics (Dec.), 1933.

<sup>2</sup> Koster, Goldzieher, Collens, and Victor: Am. J. Surg., 13:311, 1931.

<sup>3</sup> Anselmino, K. J. and Hoffman, F.: Klin. Wchnschr. 10:2380, 1931.



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## EDITORIALS\*

### THE NEW HOME AND LIBRARY BUILDINGS OF THE LOS ANGELES COUNTY MEDICAL ASSOCIATION

*A Dream That Has Been Realized.*—To be known as one of the larger component county medical societies of the United States, is a simple honor, but to possess at the same time one of the most attractive and efficient headquarters in home and library buildings to be found anywhere in the entire country, is a still more desirable and an even greater achievement.

On October 25, 1934, the new headquarters and library buildings of the Los Angeles County Medical Association were formally opened; and on pages 376 and 379 of this issue of CALIFORNIA AND WESTERN MEDICINE will be found illustrated articles concerning both of the ornate buildings.

The Council of the California Medical Association, on November 10, met in the new headquarters and passed formal resolutions on behalf of the Association's members, congratulating the Los Angeles County Medical Association on its

\* Editorials on subjects of scientific and clinical interest, contributed by members of the California Medical Association, are printed in the Editorial Comments column, which follows.

unique good fortune. The buildings have been open only little more than a month; but their increasing use, day by day, by more and more members, has already raised the question of ampler accommodations to meet the growing activities of the society.

Too much praise cannot be given to the officers of the Association, whose influence in securing a wise investment of funds in real estate of rapidly increasing value provided the capital resources by which it was possible both to erect the structures, and to provide for their maintenance.

Members of the California and American Medical Associations who have occasion to come to Los Angeles are cordially invited to visit these architectural units, and to avail themselves of their varied facilities. The buildings, as splendid expressions of achievement, showing what organized medicine can attain in the domain of material accomplishment, have an inspirational value to physicians, which should be as great or greater than that to be found through hours spent in many old and new world museums and galleries.

With headquarters and a library such as are described and portrayed in this issue, the Los Angeles County Medical Association may be said to be only on the threshold of its real work and expanding career. Its example should stimulate the members of other component societies to be equally alert concerning their own present and future needs.

### INITIATIVE 9 (CHIROPRACTIC) AND INITIATIVE 17 (NATUROPATHIC) DECISIVELY REJECTED

It is a matter of regrettable import that in the United States physicians, as a class, ordinarily evince only a moderate interest in civic affairs and political movements; but this year, owing to special conditions, members of the medical profession in California were led to take an active part in the recent political campaign, and join lay citizens who, by their ballots, decided a number of important questions. The issues which brought about this healthier participation by the members of the medical profession were two measures (Chiropractic Initiative 9 and Naturopathic Initiative 17), which it was proposed to enact into law by direct vote of the people.

For a discussion of the nature and scope of these movements, see comments in recent issues of this JOURNAL (October, pages 269 and 285, and November, page 338).

\* \* \*

*How Initiatives 9 and 17 Fared in the November Election.*—The complete and final returns of the November 6 election will not be given out from Sacramento until December 15, but figures from the daily press, published shortly after the election, will answer our present needs.

Thus, on November 9, out of a total of 10,721 precincts in California, the vote of 9,357 precincts on Initiative 9 (Chiropractic) was 598,390 yes, and 961,863 no, a difference in favor of rejection of the proposed chiropractic law of 363,473 ballots.

On Initiative 17 (Naturopathic) from a total of 8,354 precincts, the vote stood 408,884 yes, and 889,849 no, a difference in favor of rejection of the proposed naturopathic law (with 1,003 fewer precincts counted at the time) of 479,965 ballots.

In the year 1922, the osteopathic and chiropractic initiatives were passed with substantial majorities by initiative vote of the people. The figures of this year, therefore, would seem to indicate a much better understanding of the principles involved as regards the relation of sectarian healing art propaganda to real public health standards.

In the year 1922 the heavy vote in favor of the osteopathic and chiropractic initiatives came from Southern California. The November 8 returns from Los Angeles County, this year, were as follows: On Initiative 9 (Chiropractic), for 3,321 precincts out of 3,574, the vote was 284,351 yes, and 415,815 no, or a rejection majority of 131,564; while for Initiative 17 (Naturopathic), for 3,444 precincts out of 3,574, the vote was 209,193 yes, and 422,524 no, or a rejection majority of 213,331. We regret that it is not possible to give more exact figures for other counties, but those above obtainable are sufficient to show how alert the citizenry were in respect to the significance of these issues.

In Los Angeles County, the total approximate vote, according to the figures of November 8, of all the candidates for governor (3,559 precincts out of 3,574) was 931,372, while the total vote for Initiative 9 (Chiropractic) was 700,166 and for Initiative 17 (Naturopathic) was 731,717. These last statistics for Los Angeles County are illuminating, because the vote on initiative propositions this year was much larger in proportion to the gubernatorial vote than has usually been the case.

It is to be regretted that it is possible only to guess at the motivating influences which led citizens to vote "yes" or "no" on the initiatives under discussion. It may be that many who voted in favor (without understanding the scope of the measures) thought they were only giving a minority group an even chance, forgetting all about the element of low professional standards at which the opposition was primarily directed. Be that as it may, this year's conflict at the polls was most reassuring to the medical profession, because it demonstrated that organized and scientific medicine has little to fear from sectarian propaganda, if proper measures are taken to educate citizens concerning the real issues involved.

\* \* \*

*Splendid Coöperation Made the Victory Possible.*—We have not the space to comment on all the forces that made possible a victory redounding much to the credit of the California Medical Association, whose members, through their component county societies, and also in many instances working in enthusiastic coöperation with chapters of the California Public Health League, were largely responsible for the very satisfying results obtained. In some counties, members sent out

hundreds of personal letters. The radio programs, too, no doubt had a valuable educational influence. Here and there, endorsements by Chambers of Commerce and similar bodies were secured. The League for the Preservation of Professional Rights circularized all the newspapers of the State. Hospitals, through their staff funds, supplied their members with post-cards to be sent to patients, and the California Medical Association sent fifty post-card forms to each of its members.

\* \* \*

*The Value of the Appeal Through Personal Letter and Card.*—If we were to emphasize any one element in the publicity and contact work, it would be the value of the personal letter, when possible, or at least the signed post-card, for in the last analysis, what is wanted in an election is real contact with voters. The members of the California Medical Association have, as their patients, a majority of the citizens of California. These citizens believe in doctors of medicine, or they would not be their patients. The personal relation and confidence which exist between a physician and patient is not a transient or temporary thing, but is often a friendship based on years of friendly intercourse and understanding. In an election, such a patient-friend needs only be made acquainted with the nature of the basic issues at stake, to have him gladly accede to the request to consider his physician's viewpoint when he casts his own ballot.

\* \* \*

*The Attitude of Scientific Medicine.*—We have been told that, since the election, one of the defeated cultist groups has held meetings, at which it was stated that two years hence, on the basis of their experience of the year just past, they would again go before the people. If so, we predict that, if they present similar propositions, they will go down to more disastrous and decisive defeat than in this year 1934.

Scientific medicine asks no special favors from the State, but it does insist that the State shall protect its lay citizens by demanding that all who practice the healing art shall have had adequate preliminary and professional training, in order to make them safe persons to whom citizens afflicted with disease or injury, may turn for skilled aid. We believe that when this principle is properly understood, about all citizens will hold similar views. Herein lies the strength of the position of the medical profession. The only other element needed, for successful results, is a knowledge of political procedure, whereby the thousands of citizens, who are patients, shall in easiest and most practical form be made to understand any public health measures under consideration, and the reasons why their personal physicians advocate acceptance or rejection.

It is gratifying to know that also the sectarian groups in Arizona and Oregon,\* as well as in California, went down to defeat in the November elections. May it ever be so!

\* See page 430 of this issue for comment thereon.

*Need of a Qualifying Certificate (Basic Science) Act.*—In concluding these comments, a few words on the program of the future may be in order. The citizens of California should not be called upon, every two to four years, to vote upon specious propositions such as the defeated Initiatives 9 and 17. Nor is it fair that the members of the medical profession should be obliged recurrently to give political battle to sectarian groups who would destroy decent standards of professional attainment. What then can be proposed to prevent such experiences? Our answer is that a practical remedy is to be found in a qualifying certificate (basic science) law. In the November issue of CALIFORNIA AND WESTERN MEDICINE (page 339) some of the provisions of such a law, as accepted in a draft submitted to the Council of the California Medical Association by its special committee, were outlined. If you failed to read those comments, we suggest that you make a memorandum and refer to them. Any suggestions you may have thereon can be sent to the Association secretary, who will transmit them to the chairman of the special committee.

Whatever hesitancy may have existed in the past, concerning the advisability of placing a qualifying certificate (basic science) law on the State election ballot, has been dissipated by the recent election. It may, therefore, be stated that our immediate work is not so much to arrange for battle with sectarian practitioners at the next election, as it is to carry on a campaign of education so that the citizens of California will be prepared to enact by initiative vote, not later than 1936, a qualifying certificate law.

#### THE NEW CALIFORNIA LEGISLATURE

*The Fifty-First Session Will Convene in January, 1935.*—The January issue of CALIFORNIA AND WESTERN MEDICINE will be placed in the mails on January 10, but the fifty-fifth session of the legislature will begin some days before, on January 2, the legislature meeting throughout that month, and then going into a constitutional recess of one month (during February), to reconvene and be in session through March and April, and probably into May. Its rules of procedure provide that bills may be introduced throughout the month of January, but that after the February recess no bills may be introduced except by special consent.

It is possible that during the month of January a total of almost one thousand proposed laws having a bearing on public health and medical matters may be introduced. Each of these will necessitate careful reading and study. As a matter of fact, to properly safeguard the public health almost every bill must be perused to determine whether paragraphs having to do with public health interests are contained therein. At the coming session the task which confronts the California Medical Association's Committee on Public Policy and Legislation promises, in these unsettled times, to be greater and more onerous than ever. On that account, it is hoped that component county societies, through their members and offi-

cers, will strive to give to the committee, of which Dr. Junius B. Harris\* of Sacramento is chairman, as prompt and efficient aid as may be possible.

\* \* \*

*Cordial Affiliations Should Be Established with State Assemblymen and Senators.*—The November 6 election settled the question as to who should be State Assemblymen and Senators. Before these fellow citizens go as members-elect to Sacramento, the most cordial personal contacts should be made by the many members of the California Medical Association. State Assemblymen and State Senators are responsive to the viewpoints of their constituents, and it is a distinct advantage to the interests of the public health, and of organized and scientific medicine, if such Assemblymen and Senators have pleasant personal relations among the medical profession. Our representatives will be in their home communities during the month of December, and that would be a convenient time in which to renew or to make friendly affiliations.† Once the legislators are in Sacramento, the rush and turmoil of the political environment will not be so conducive to a good mutual understanding. All officers and members of component county societies, therefore, should avail themselves of the opportunities which still exist during the coming month of December, to create and make stronger their personal and friendly contacts with those who, as legislators, will be required to pass upon a multitude of public health measures.

#### THE MEDICAL-ECONOMICS SURVEY OF THE CALIFORNIA MEDICAL ASSOCIATION—IMPORTANCE OF COÖPERATION

*Questionnaire of the Committee of Five.*—Reasons why it is necessary that all members of the California Medical Association should coöperate with the California Medical Association Committee of Five by sending in their filled-out confidential and impersonal questionnaire blanks as promptly as possible were given in the November issue of CALIFORNIA AND WESTERN MEDICINE (pages 338 and 344). The attention of all members who have not so far forwarded their replies is again called to the requests therein made, in the hope that their perusal will lead to an early response with the medical-economic information that is so much needed if the survey, which our Association has started, is to be of real value. The office headquarters of the administrative staff of the California Medical Association Survey is located at 9623 Brighton Way, Beverly Hills, California, and to this address all communications should be mailed.

Officers of county societies are urged to bring this matter to the attention of their members at every society meeting, and members themselves are asked to mention the subject to one another, because such comment and discussion are more apt

\* Editor's Note.—At the time these page proofs are being read, Doctor Harris is reported most seriously ill in the Sutter Hospital in Sacramento. His colleagues extend their sincerest wishes for a prompt and complete recovery.

† For roster of Fifty-first California Legislature, see page 431.



to lead tardy or indifferent members to fulfill their plain responsibilities in this work. For the information of any who have permitted themselves to think that this survey by the Committee of Five is of little consequence, it may be pertinent to add that some thousands of dollars have already been drawn from the treasury of the California Medical Association, in order to properly inaugurate and carry through this work. Therefore, if the results desired are to be realized, almost eighty per cent, or four thousand California Medical Association members, must still send in their replies to Professors Dodds and Watkins, who are supervising the investigation for the Committee of Five. Moreover, the answered questionnaires must be received as soon as possible, if the compilation of facts is to be completed in time for presentation at the session of the next California Legislature, which will begin on January 2, 1935, and at which session, and prior to February 1, all new reports and proposed legislation are supposed to be submitted.

So once again, on behalf of the Committee of Five (which your delegates, on your behalf, brought into existence at the 1934 Annual Session), an urgent appeal is made that in the event of your not yet having done so, you will fill in your questionnaires, and send them at once to the committee.

For those who have mailed in their replies, the thanks of the Association; with the request, however, that they continue their good work by constituting themselves special committees to check on their personal friends in the profession, and to urge all who have been laggard to give the survey their prompt attention. If we fail in this now, there may later be cause for much regret. If, on the contrary, each member does his part, then individually and collectively, we shall have reason to be satisfied and proud.

\* \* \*

*The Field Survey by the Federal Government, Under the Auspices of the California State Board of Health.*—While on the subject of the California Medical Association Survey, it may be permissible to state that it is gratifying to the members of the California Medical Association to know that the sickness-survey which is being made in California is not to be confined to facts and figures secured only from members of the medical profession, but that, in addition, a field survey of lay citizens has been undertaken. This investigation by field workers, which will cover some twenty-five counties, and be of sufficient scope to be a fair cross-section of the varied environments of our large State, is being carried on through federal aid, secured by the California State Board of Health and conducted in its name. The information so secured by the field workers from lay citizens, when used in connection with that now in process of collection by the California Medical Association from its own five thousand members, should be of great value, not only to the State of California at large, but to other commonwealths of the Union.

#### CHANGE IN ADMISSION REQUIREMENTS AT THE "LOS ANGELES COUNTY GENERAL HOSPITAL"

*The Medical and Osteopathic Units of the Los Angeles General Hospital.*—Many members of the California Medical Association are directly or indirectly interested in County Hospital activities, and most of these are aware of the fact that, some years ago, in Los Angeles, the Board of Supervisors instituted a new unit, staffed by doctors of osteopathy. The problem thereupon immediately arose concerning the rule of procedure to be followed in admitting patients to the old medical and the new osteopathic units. Because the County of Los Angeles had spent some \$600,000 in remodeling one of the hospital buildings for osteopathic use, and because the entire hospital at that time was much overcrowded, the Supervisors in 1928 insisted that the new bed capacity so provided should be promptly used and kept filled. Thus it was that the empirical and troublous rule that every tenth patient applying for admission should be sent to the osteopathic unit was promulgated by the then superintendent, Dr. Neal N. Wood. In the ensuing years this rule never ceased to be a source of irritation, and its existence may be said to have been one of the reasons why the American College of Surgeons refused to include the hospital on its approved list. Fortunately, however, the Council on Medical Education and Hospitals of the American Medical Association did place the hospital on its accredited list, so that interne service, secured from California and Eastern medical schools and including some 125 internes, in constant residence, was not seriously interfered with.

\* \* \*

*New Names for the Medical and Osteopathic Units.*—Another point of misunderstanding leading to confusion had to do with the names of the medical and osteopathic units, the numerical system of Unit One and Unit Three being used to designate the two hospitals. The Medical Board of the Attending Staff of the Medical Unit, year after year, made earnest efforts to bring about a change in the nomenclature of the two institutions, and a few months ago the County Board of Supervisors were successfully petitioned to rename the two hospitals. The Supervisors continued the title "Los Angeles County General Hospital" as the designation for all its county hospital activities, calling the medical unit "The Los Angeles County Hospital" (the old term, for many years, of the original county hospital) and applying the name "Los Angeles County Osteopathic Hospital" to the osteopathic unit.

\* \* \*

*The "One-in-Ten" Admission Rule Abolished on November 1, 1934.*—Subsequent to this, and again after discussion and by mutual consent, it was possible for Superintendents Martin and Olsen to issue Bulletin 1498, under date of October 25, 1934, addressed "To All Physicians and Surgeons and Public Generally in Los Angeles

County, and explaining the new rules and procedures regarding admission of patients. From it we quote the following paragraphs:

*Los Angeles County General Hospital Made Up of Two Hospitals.*—By a recent action of the Board of Supervisors it was ordered that while this institution as a whole should be known as "Los Angeles County General Hospital" for purposes of financial administration, those portions of it in which patients are treated by physicians and surgeons who are doctors of medicine (M. D.'s) should be known for public and professional purposes as "Los Angeles County Hospital" and those portions in which patients are treated by physicians and surgeons who are doctors of osteopathy (D. O.'s) should be known for public and professional purposes as "Los Angeles County Osteopathic Hospital."

The intent of this action was to indicate more clearly to the public the distinction in name between the two types of medical and surgical treatment offered to patients at these two county institutions and to let the public make its own choice between these two types rather than assign applicants arbitrarily by the numerical ratio of one in ten as heretofore, a ratio based upon the relative bed capacity of the Osteopathic Hospital as compared with the Medical Hospital before the opening of the new acute unit. The staffs of physicians and surgeons of both hospitals acquiesce in the abolition of the old rule, feeling that the public should have a free choice. The hospital administration favors the change because it simplifies admitting procedure and saves a large number of transfers of patients after admission, thus contributing to economical operation, a very important item in times like the present.

*Persons Wishing to Be Admitted Should Indicate Their Choice.*—The new plan of "free choice" will go into effect November 1, 1934. On and after that date all persons and agencies having anything to do with referral of patients to the Los Angeles County General Hospital are requested to obtain from the patient a statement of choice as between the Los Angeles County Hospital (staff made up of M. D.'s) and the Los Angeles County Osteopathic Hospital (staff made up of D. O.'s) and to indicate this choice when notifying the hospital regarding patients; also to instruct patients who are to make personal application to the hospital that they should make their choice before applying, and thus save much time and many steps by going direct to the hospital of their choice. . . .

*Explanation of Staffs to Prospective Patients.*—In explaining to applicants for admission that there are two hospitals with two types of doctors between which a choice must be made, the following language is advised:

"The professional staffs of the Los Angeles County General Hospital are composed of two types of doctors:

"(a) Physicians and surgeons who are doctors of medicine (M. D.'s) working in the 'Los Angeles County Hospital,' and

"(b) Physicians and surgeons who are doctors of osteopathy (D. O.'s) working in the 'Los Angeles County Osteopathic Hospital.'

"Applicants who are eligible for care at county expense may be admitted to either of the two hospitals, but should state their choice before admission and go or be taken direct to the admitting department of the hospital of their choice."

Your assistance in disseminating this information to all concerned will be appreciated.

The Medical Board of the Attending Staff of the Los Angeles County Hospital may feel proud of the service it has rendered in a matter of such very near interest to the two thousand members of the Los Angeles County Medical Association, of general concern to the other members of the California Medical Association and of no little

importance to the public at large; and because many members of the California Medical Association have long been watching the course of events, space is here given to the new rules.

#### REPRINTS OF ARTICLES ON ANIMAL EXPERIMENTATION

*The Ivy and Rowell Articles to Be Reprinted.*—The October number of CALIFORNIA AND WESTERN MEDICINE called attention (on page 272) to an excellent presentation of facts concerning animal experimentation, as portrayed in the Northwestern University exhibit at the Chicago Century of Progress Fair. The text of Professor A. C. Ivy's article on "Some Contributions on Animals to Human Health" was printed on page 247 of the same issue. Most members of the medical profession are familiar with many of the facts brought out in Doctor Ivy's exhibit; but, on the other hand, comparatively few of us had grouped that information in anything like the admirable set-up arranged by him and his faculty-colleagues of Northwestern University. The November issue of CALIFORNIA AND WESTERN MEDICINE (page 325) printed what might be styled a complementary or follow-up article, in the form of an address by Doctor Ivy, having the title "Seven Wonders of Medical Science—Modern Miracles." Readers of this JOURNAL are urged to peruse both articles, because they give complete and sane answers to the misstatements of antivivisectionists.

At its last meeting, held in Los Angeles on November 10, the Council of the California Medical Association authorized the publication of a reprint leaflet that would contain the two addresses by Doctor Ivy and also the article on "Antivivisection" by Chester Rowell, LL. D., first appearing on page 352 of the May, 1933, issue of CALIFORNIA AND WESTERN MEDICINE. Members of the California Medical Association, and of its Woman's Auxiliary, who desire copies of these reprints, should send in their requests to the Association Secretary.

#### EDITORIAL COMMENT\*

##### DRUGS AND DEAFNESS

The pathways along which the art of healing has evolved are strewn with the milestones of empirical methods, leaving often behind stigmata as serious as, if not more so than, the diseases they were intended to cure. Our progress has been amazing, research has been indefatigable, but there are some fields which as yet have received far too little attention. Clinicians of the various specialties are justifiably interested mainly in curing or ameliorating the condition for which their advice is being sought. Other concomitant effects of their

\* This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

treatment, often deemed temporary or harmless, are apt to interest them but little.

The statistics of otologists, and of various national and other surveys, give evidence in our population of the widespread incidence of hearing impairment, which has been estimated to be as high as 17,000,000. The testing of the hearing of some 800,000 school children has given indication of the tremendous amount of unnoticed but incipient deafness not only in these children, but which undoubtedly exists in the preschool child as well as in adults. The American Federation of Organizations for the Hard of Hearing—a national association composed chiefly of members of the various Leagues for the Hard of Hearing throughout the country—by its constant propaganda for prevention, and for a better understanding by the public (which includes physicians) of the general problems of deafness, has brought this situation home to many of us.

The otologists and geneticists have shown the indisputable fact of hereditary predisposition and congenital deafness. The opinion now prevails that the eighth nerve of a child which may have inherited constitutional factors predisposing to deafness is far more susceptible to the effects of colds and bacterial toxins than one with no hereditary taint. Any individual with a previously damaged eighth nerve, or with one which, because of hereditary factors, tends to early atrophy, comes within the same category as to the effects of certain drugs currently used in general practice, and perhaps occasionally by some otologists.

The action on the vegetative nerve of the older drugs has been pretty thoroughly studied. Certain of them have been purified, and others whose action is practically identical, though less toxic, have been synthesized; but as a matter of fact the paucity of our knowledge of their effect on the eighth nerve is startling. A fool may be born every minute, but if the present rate for drugs continues they will soon beat that record.

The studies which have been undertaken along the lines indicated are almost negligible and, moreover, they have been made, for the most part, upon normally-hearing man and animals.

The great hope in solving the many problems concerning the absorption of drugs in the auditory region resides in our newer knowledge of the transmission of nervous impulses (Loewi<sup>1</sup>) of vestibular function (Tait<sup>2</sup>) and that obtained by the brilliant researches of de Nô<sup>3</sup> in his neuro-anatomic and neurophysiologic investigations of the ear. Furthermore, otologists, physiologists, physcists, and psychologists have given us three new methods for testing the hearing of animals, and thus have greatly stimulated otological research.

Medical literature is replete with clinical investigations in which various drugs, many of them new, are being used. These range from analgesics, hypnotics and anesthetics—local and general—to antipyretics and antispasmodics. Most of these

are alkaloids and salicylates or their derivatives; morphin<sup>4</sup> and aspirin for colds, quinin<sup>5</sup> in large doses for the induction of labor, and even as lotions<sup>6</sup> to prevent sunburn. It is not evident that thought, to any extent, has been taken by physicians of the possible cumulative and permanent effect that many of these drugs, administered by the usual route and in the customary dosages, may have upon the auditory nerve of a deafened individual. He might be likened to the normal man whom six cocktails would not visibly affect, but who would "pass out" with two more. The man with the damaged nerve is perhaps often already affected to the point where a minimal dosage of certain drugs would cause further irreparable damage to his hearing. We cannot do much for a hereditary predisposition to disease, but we can, to a considerable extent, control or combat the environmental factors which initiate its progress.

When a drug is being administered to a deafened patient, he may ask if it will increase his deafness. The physician, thinking too often in terms of the transitory effect of quinin on the normally-hearing individual, is apt to say "No," or "It is not at all likely."

Research, according to the most modern methods, is now being initiated in the East and in California (Coleman Fund, University of California); and exact, or at least the probable effect, cumulative or otherwise, on the eighth nerve of man of many of the drugs now commonly used, especially the salicylates and alkaloids, will be discovered. Given the well-known incidence of deafness, until further information becomes available, a plea is made that clinicians at large become more deafness-minded in the use of such drugs.

It is hoped that legal measures may be taken to decrease the indiscriminate use by the public of such drugs as aspirin without a physician's prescription, and that the latter, when filled, will be taken up by the pharmacist.

Hooper Foundation.

GEORGE E. COLEMAN,  
San Francisco.

#### INTERPHASIC BACTERIAL ANTAGONISM

One of the newest discoveries of bacteriology is the well-confirmed fact that different phases of the same bacterial species are mutually inhibitory. Only one dominant phase, or type, may multiply in a mixed culture or mixed infection of different strains of the same bacterial species; the minor types or phasic variants being suppressed, transformed or autolysed by the interphasic biochemical incompatibility. This discovery has an important bearing on numerous clinical diagnostic methods, many of which are based on the assumed perfect compatibility of all phases and types of the same specific infectious agent.

Test-tube incompatibility of different bacterial species has, of course, long been known, with recognition of a similar incompatibility in mixed

<sup>1</sup> Loewi, Otto: The Harvey Lectures, pp. 218-233, 1932-1933. The Williams Wilkins Company.

<sup>2</sup> Tait, John: Trans. Am. Otol. Soc., pp. 146-177, 1932.

<sup>3</sup> de Nô, Rafael Lorente: Laryngoscope, 43:1-38, 1933.

<sup>4</sup> Diehl, Harold S.: J. A. M. A., Vol. 101, No. 26, pp. 2042-2049 (Dec.), 1933.

<sup>5</sup> King, E. L.: J. A. M. A., Vol. 101, No. 15, pp. 1145-1148, 1933.

<sup>6</sup> Am. Jour. Pharm. (Jan.), 1934.



infections. An experimental anthrax infection of laboratory animals, for example, can be "inhibited" by the previous or subsequent inoculation with pyocyanous. The enzymes extracted from certain putrefactive bacteria will protect mice against multilethal doses of pneumococci. Experimental diphtheria "carriers" can be cured by local inoculation with certain non-pathogenic cocci.

A definite hint of growth incompatibility between different types of the same species was reported about two years ago by Doctor Ettinger-Tulczynska<sup>1</sup> of the Robert Koch Institute, Berlin. He found that mice inoculated with a mixed type of pneumococcus suspension almost invariably yielded but one type of pneumococcus at autopsy. In one series of eighty-four inoculations with Type I plus Type II, for example, a pure culture of but one type was recovered from sixty-two mice, a mixed infection being demonstrable in but six mice. The Berlin clinician then inoculated nutrient broth with various arbitrary mixtures of the same pneumococcus types. He found that tubes inoculated with certain relative proportions of two types almost invariably killed off, suppressed (or transformed) the less numerous type. The relative proportion necessary for complete type suppression varied from a 1000:1 ratio with one mixture to a ratio of 1,000,000:1, depending upon the strains selected. In a detailed analysis of this alien-type suppression, Grundel and Mayer<sup>2</sup> found that the cultural incompatibility was not linked with relative growth-rate or virulence, but was apparently due to an unknown "Factor X," for which they invented the non-committal term "Konkurrenzfähigkeit."

Neufeld and Kahn<sup>3</sup> currently report a similar incompatibility or lack of "Konkurrenzfähigkeit" between the R and S variants of the same pneumococcus type, a test-tube incompatibility also demonstrable by animal inoculation. A similar growth incompatibility was found between different diphtheria strains. The "type-stabilizing" hormone was demonstrable in the apparently sterile supernatant fluid from centrifuged cultures, but was apparently lost as a result of attempted passage through a Berkefeld filter.

Stanford University.

W. H. MANWARING,  
Palo Alto.

#### THE PHYSICIAN AS A BUSINESS MAN

When one contemplates the physician as a business man, the picture is often far from appealing. The few physicians who stand out as examples of business success are notable for their rarity. The rank and file seem to be floundering in a veritable slough of despond.

Statistics disclose that only the exceptional physician is sufficiently provident to lay aside savings adequate for his declining years, even when his earnings permit; or, in case he does thus look ahead, to hold them against the onslaughts of

the economic racketeer. Probably not more than 10 per cent of the physicians who have been wholly dependent on their practice reach the age of three score years and ten in other than a sorry financial plight. Serene old age proves largely a pipe-dream to the other 90 per cent.

In the face of a condition, therefore, like that of the past four years, with its attendant evils of buyers' strikes, diminished collections, and the encroachment of sundry bizarre schemes to bewilder both the physician and the populace, the situation becomes critical in the extreme. Today, it is no exaggeration to say that fully 50 per cent of the members of the profession are in genuine distress.

To say what should next be said, is quite certain to prove unwelcome. But truth is truth, even though distasteful. The issue is between professional ethics and traditions on the one hand, and self-preservation on the other. The root of the trouble is not so much the business incompetence of the individual physician, as his lethargy and disinclination to interfere with the established order of things.

In the meanwhile, he has only to look about him to realize that an increasing number, disregarding ethics and tradition, are receiving the support that should be his by buying and paying for effective publicity.

Again, he sees (without, however, perceiving) the inroads being made upon the practice of medicine, in ever increasing number and variety, by lay profiteers and misguided politicians; and too often takes this lying down.

If the physician were not so confirmed an individualist, he would have recognized long since that the only way to overcome the evils surrounding him is by adopting the necessary business ideas and policies. In this he cannot act alone and maintain his self-respect; but through organizations already existing, or others to be formed for the particular purpose, he can assert himself and protect his future if he has the courage to quit the bench and go to bat.

The truth is that the time has fully come when the medical profession can no longer afford to remain passive, to drift along in careless fashion toward the reefs to be discerned so plainly just ahead. Already state medicine looms on the near horizon. The immediate future holds definite menace. Less compensation and greater responsibility under political bureaus controlled by laymen, loss of both dignity and independence, imposition, humiliation, financial and social ignominy—these are some of the dangers which seem to be lurking around the next corner. The times have changed; too many physicians creak along in the same old rut. To continue a course of apathetic indifference is simply to invite disaster.

The readjustment here hinted at may not be attractive, but it appears the only hopeful alternative. The issue is very clear: Does the physician prefer meekly to submit, or to see and heed the warning signals displayed on every hand?

947 West Eighth Street.

A. B. COOKE,  
Los Angeles.

<sup>1</sup> Ettinger-Tulczynska, R.: *Zeit. Hyg.*, 113:762, 1932.

<sup>2</sup> Grundel, M., and Mayer, U.: *Zentralbl. f. Bact.*, 129:20, 1933.

<sup>3</sup> Neufeld, F., and Kuhn, H.: *Zeit. Hyg.*, 116:95, 1934.

# CALIFORNIA MEDICAL ASSOCIATION

FREDERICK C. WARNSHUIS, M. D., Associate Editor for California

This department contains official notices, reports of county society proceedings and other information having to do with the State Association and its component county societies. The copy for the department is edited by the State Association Secretary, to whom communications for this department should be sent. Rosters of State Association officers and committees and of component county societies and affiliated organizations, are printed in the front advertising section (Adv. pages 2, 4 and 6).

## CALIFORNIA MEDICAL ASSOCIATION

CLARENCE G. TOLAND.....President  
ROBERT A. PEERS.....President-Elect  
FREDERICK C. WARNSHUIS.....Secretary-Treasurer and Associate Editor for California

### SEASON'S GREETINGS

Sincere and cordial good wishes for a joyous holiday season are extended to every member by the entire personnel of the headquarters staff and secretary. May this holiday season bring to you and yours unalloyed happiness and good cheer.

### MONTH'S ACTIVITIES AND COMMENTS

The Committee of Five will present a preliminary report in December. The action of the State Board of Health in securing \$50,000 for survey expenses removed this drain upon the Association's reserve funds.

The Ivy exhibit on "What Animals have Contributed to Human Health" has been secured by the State Association and will be exhibited in Sacramento during the session of the legislature.

*Scientific Exhibits, Annual Session.*—Members desiring to present scientific exhibits at the 1935 annual session in Yosemite National Park will please write to the State Secretary for assignment of space.

The following telegram was received:

Chicago, 12:47 p. m., Nov. 7, 1934.  
Secretary, California Medical Association,  
San Francisco.

Heartiest congratulations to California Medical Association for splendid results secured through its magnificent efforts.

Olin West.

*Committee of Five.*—This committee will make a preliminary report to the Council early in December.

*Special Meeting of the House of Delegates.*—The Council has directed that a special meeting of the House of Delegates be called before January 15. The purpose of this meeting is to receive the report of the Committee of Five and to determine the Association's policy in regard to legislation related to medical care and economic security. The date for the special meeting will be determined at the December Council meeting. The official call and notice will be sent to the delegates who were seated during the last annual session and to county societies.

*Conference of County Secretaries.*—The Council approved the following recommendation:

*Resolved,* That an annual conference of county society secretaries be held and that the traveling expenses of secretaries and the cost of a dinner be paid by the Association.

This conference will be arranged and notification sent to each county secretary. Secretaries are requested to plan attendance.

*Pocket Membership Cards.*—By direction of the Council the issuance of pocket membership cards will be discontinued. In their stead each member, upon payment of his annual dues, will receive from the State Association a membership certificate, 7x9, suitable for framing. The purpose of this innovation is threefold: Hung upon the reception-room wall, it will convey to the member's clientele his organizational affiliation. Second, it will serve to acquaint the public with the existence of the county and state organizations. Third, it may induce the eligible non-member to affiliate lest his clientele inquire why he is not a member as is Doctor Blank. Members are requested to display their certificates upon receipt. This may be expedited by the prompt payment of dues.

The following conference was held November 22 and 23:

*Council Meeting.*—An adjourned meeting was held in Los Angeles November 10. On November 11 the State Secretary met with the Riverside County Society, and on November 12 President Toland, Councilors Roblee, Pallette, Wilson, and the State Secretary met with the San Bernardino County Society.

*Legislation.*—The Council approved the drafting of bills to provide for a qualification certificate and also to provide against unethical advertising. Further information will be imparted at a later date.

*Economic Security Committee.*—Members should read the editorials and comments in the *Journal of the American Medical Association* upon the program and activities of President Roosevelt's Committee on Economic Security.

### OFFICIAL NOTICE

#### Proposed Amendments to the Constitution

(Second Publication)

#### ARTICLE XIII, SECTION 2

Amend Article XIII by adding a new section to be numbered Section 2, reading as follows:

"Section 2. To further aid in carrying out the objects of the Association, the House of Delegates at any meeting at any regular or special session thereof may, by a two-thirds vote of the membership thereof present and acting, authorize, empower and direct the Council to cause the formation and organization of one or more corporations under the laws of the State of California with such incorporators, name, purposes, county where the principal office for the transaction of business is to be located, first directors, the total number of shares, the aggregate par value, if any, of all shares, classes of shares, par value of any shares having par value, statement of the provisions, privileges and restrictions granted or imposed upon the respective classes of shares, or if the corporation be formed without capital stock, the authorized number and qualifications of its voting and other rights of each class of members and the liability of each and all classes, to dues or assessments, and with such further provisions in the articles of incorporation thereof and with such by-laws as the Council shall prescribe, fix and determine; and the House of Delegates at any meeting of any regular or special session thereof may by a vote of two-thirds of the members thereof present

and acting, authorize, empower and direct the Council to grant, assign, transfer, convey or deliver or cause to be granted, assigned, transferred, conveyed or delivered to any of such corporations upon the formation thereof or to applicants for health and accident or other insurance in or from any of said corporations at or prior to the formation thereof without any consideration therefor, such funds and property, real or personal, of this Association as the House of Delegates shall from time to time authorize or ratify."

#### ARTICLE XIV, SECTION 1

Amend By-Laws by adding thereto a new chapter to be numbered XIV, Section 1, reading as follows: "Corporations. To further aid in carrying out the objects of the Association, the House of Delegates at any meeting at any regular or special session thereof, may by a two-thirds vote of the membership thereof present and acting, authorize, empower and direct the Council to cause the formation and organization of one or more corporations under the laws of the State of California with such incorporators, name, purposes, county where the principal office for the transaction of business is to be located, first directors, the total number of shares, the aggregate par value, if any, of all shares, classes of shares, par value of any shares having par value, statement of the provisions, privileges and restrictions granted or imposed upon the respective classes of shares, or if the corporation be formed without capital stock, the authorized number and qualifications of its members, the different classes of members, if any, the property, voting and other rights of each class of members and the liability of each and all classes, to dues or assessments, and with such further provisions in the articles of incorporation thereof and with such by-laws as the Council shall prescribe, fix and determine; and the House of Delegates at any meeting of any regular or special session thereof may by a vote of two-thirds of the members thereof present and acting, authorize, empower and direct the Council to grant, assign, transfer, convey or deliver or cause to be granted, assigned, transferred, conveyed or delivered to any of such corporations upon the formation thereof or to applicants for health and accident or other insurance in or from any of said corporations at or prior to the formation thereof without any consideration therefor, such funds and property, real or personal, of this Association as the House of Delegates shall from time to time authorize or ratify."

### STATE AND COUNTY SOCIETY ACTIVITIES

#### YOUR COUNTY SOCIETY

A census of licensees of medicine in the city and county of San Francisco recently has been taken by the Membership Committee with some rather startling results. Quite often non-members, who are slow to recognize their organization obligations, as well as privileges, have queried, "Why should I belong to the County Medical Society when its membership represents only half of the doctors of medicine in the city?"

Here are the facts:

Physicians and surgeons licensed in San Francisco County (Directory of Board of Medical Examiners, March 3, 1934).....	1521
Members of San Francisco County Medical Society (November 1, 1934).....	809
Non-members.....	712

#### Non-members May Be Classified as Follows

Not eligible for membership*	110
Retired.....	109
Absent on leave or permanently absent.....	99
In Public Health Service.....	6
In United States Army or Navy Service.....	8
Deceased.....	14
Full-time life insurance positions.....	7
Homeopathic Society.....	40
First or second-year licensees in hospital service.....	37
Licensed over thirty years and never affiliated.....	126
All others.....	156
Total.....	712

\*Constitutional restrictions on membership are responsible for the use of this grouping in our classification.

It is obvious from these figures that the society represents not 50 per cent, but 85 per cent of the available licensees in the county. If you are one of the 156, you are decidedly in the minority, and in the face of important changes now taking place in the medical world it behooves you as never before to affiliate with other physicians for mutual benefit.

To the Membership Committee and its auxiliaries in each hospital, the facts above noted should be an inspiration and an incentive to bring every hospital staff member into the society. Two hospitals now have 100 per cent representation. So far this year, 66 new applications for membership have been favorably acted upon. The present membership of 828 compares with 814 as of this date last year, i. e., an increase of 14.

At no time since the beginning of the "depression" has growth been so rapid. Every eligible individual should be a party to such growth. This can be accomplished easily if groups of five members each bring in just one application or if every hospital group obtains eight applications.

Fellow member, the society is what you make it, and because of you now represents a large majority of available physicians. You can make it represent them all.

#### THE MEDICAL HISTORY OF CALIFORNIA

It is purposed to establish in the Association's central office a Bureau of the Medical History of California, and thus record the historical facts and incidents that have characterized California's medical activities. An appeal is made to members to aid in establishing this historical record.

The following documents and material are desired:

1. Minutes and records of medical organizations and societies.
2. Early histories of medical institutions, schools, hospitals, and clinics.
3. Early medical writings.
4. Biographies of medical pioneers.
5. Medical journals and books.
6. Instruments, saddle-bags, etc.
7. Photographs.

In fact, everything that is related to medicine, medical practice and medical organizations in the early days of California, will be welcome.

It is suggested that members explore their libraries and files and advise whether they are willing to contribute historical material to this Bureau of History. Your interest and assistance is solicited.

#### EDUCATION OF THE PUBLIC

One of the functions of a county medical society is to present to the public fundamental facts of modern scientific medicine for the purpose of building up sound public opinion relative to the questions of public and private health. To send out teachers, not advocates. The truths of scientific medicine, once imparted, are self-evident. This public education may be accomplished by means of talks before Parent-Teacher Associations, luncheon clubs, granges and similar organizations. It is hoped that county societies will embrace these opportunities.

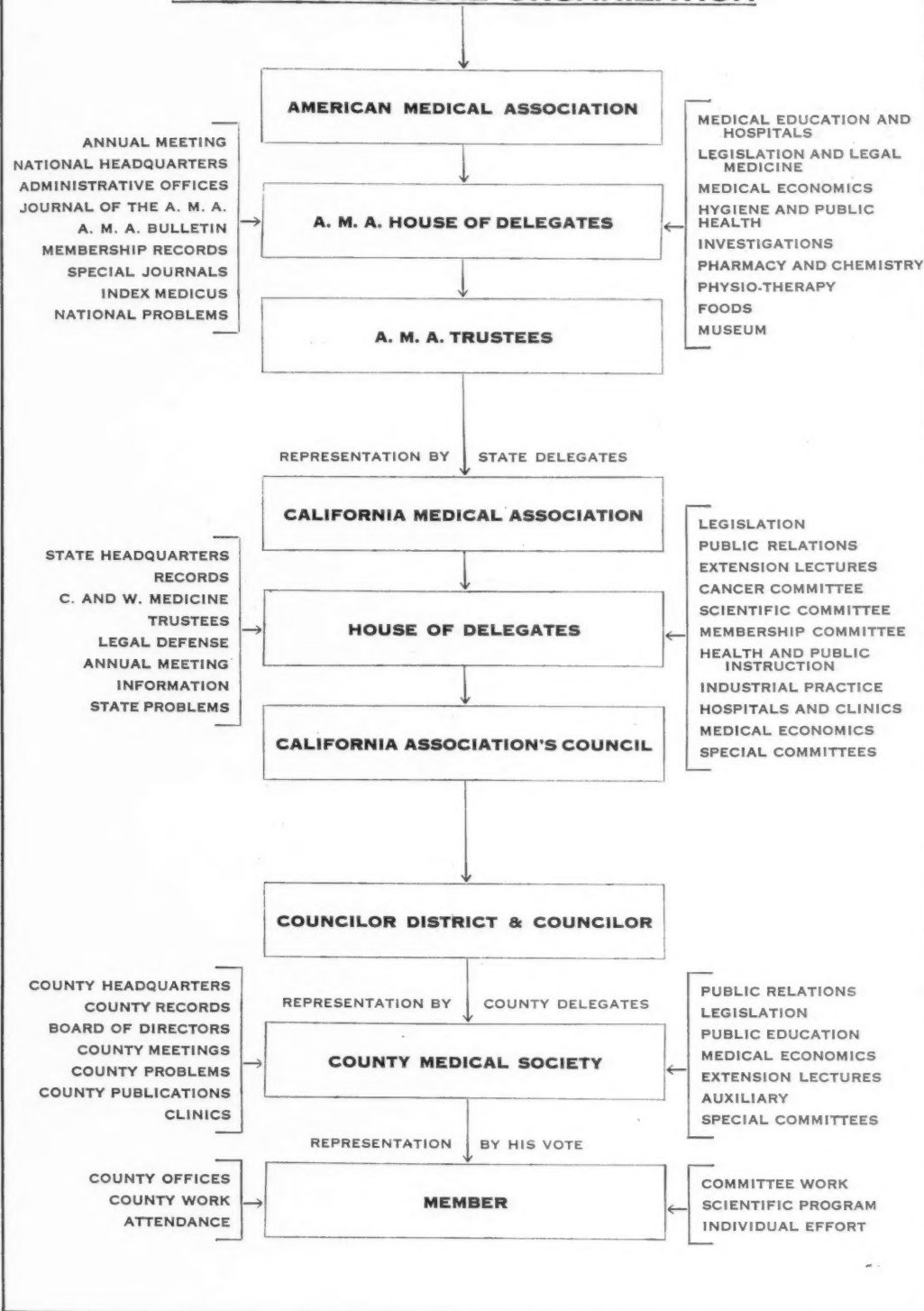
#### PLAN OF MEDICAL ORGANIZATION

For informative purposes as well as for future reference, a diagrammatic illustration of the plan of medical organization is presented. This diagram enables one to clearly visualize a member's relationship to the county, state, and national organizations that compose our medical federacy. A member can easily perceive what his membership means and how his professional and personal interests are the concern of these interrelated bodies and their created committees.

The diagram also enables one to quickly present to the uninformed the interrelations of these several medical groups.



## PLAN OF MEDICAL ORGANIZATION



## CALIFORNIA IN ORGANIZED RANKS

	Square Miles Area	Population	Population Per M. D.	Number M. D.'s	Association Members	Per Cent
New York .....	47,654	12,965,000	568	22,812	13,074	57
Pennsylvania .....	44,832	9,787,000	790	12,608	7,831	62
Illinois .....	58,043	7,826,000	678	11,504	6,879	59
Ohio .....	40,740	6,798,000	775	8,769	5,168	59
California .....	155,652	6,062,000	577	10,490	5,167	49

Did you know that:

1. California stands fifth in organized medicine ranks.

2. That 3,359 California doctors were Fellows of the American Medical Association—65 per cent of our members.

3. That 53 per cent of the members receive the *Journal of the American Medical Association*.

4. That about 60 per cent of the physicians of the United States are affiliated with their county and state organizations.

5. That to equal the country's average, 11 per cent of California's non-members should become members.

County societies are requested to secure the affiliation of at least 11 per cent of the non-members who are eligible before January 1, 1935. Will you achieve this in your county?

## WORTH PONDERING OVER

1. Whenever the control of the practice of medicine has been wrested from the medical profession, it is found that either the public or the profession or both are dissatisfied with the result. Conversely, it is found that in those countries where the medical profession retains control of the practice of medicine, both the public and the profession are satisfied.

2. The medical profession and not commercial conjurers or political agitators must select the correct course, and this selection will be made in the interests of the public no less than for the continued freedom, independence and self-respect of medicine itself.

3. Economics is the science that deals with the material means of satisfying human desires. The health desires and needs of the public will be satisfied when we of the profession reflect the material means of cooperative loyalty and individual proficiency.

4. In attempting to arrive at a solution of our economic and professional problems it would be well to fully realize that by a united willingness to act courageously and effectively we will reveal a discipline, a resourcefulness, a fertility of invention, a capacity to develop leadership and respond to it that will enable us to stand before the entire world and avow our confidence in our own strength, our own purposes, our own way of life, and our own way of rendering professional services.

5. Respect and love the colleagues of your profession. But, if impossible, at least be patient. Do not discuss other physicians. To narrate their shortcomings is the shame of the wise man; to talk of their defects is the business of the small. A moment's discussion of a single error may work perpetual injury to a reputation. Consider such consequences. Every physician has his own characteristics and his own methods. Do not judge lightly. Respect the older physician and endear the younger to you. Stress their better side and refuse to comment on their treatment since you have not seen the patient.

## "SEE YOUR MAN"

At the November election the voters determined who should represent them in the Senate and Assembly during the coming session of the legislature. These senators and assemblymen are your representatives. They are more or less dependent upon your advice and expressions as to what legislation should be enacted.

During January, bills will be introduced dealing with matters related to public health and medical care. Some of this proposed legislation is desirable for the best health interests of the public. Other bills will propose the enactment of very undesirable legislation.

In order to decide rightly and constructively, members of the legislature will need dependable advice. Our members can and must impart reliable guiding information to senators and assemblymen. To that end it is urged that legislative committees of county societies contact their assemblymen and senator. "See your man," become acquainted with him; cultivate his confidence and supply him with dependable information on all health and medical legislation.

"See your man" and cause him to support sound, sane and safe health and medical legislation. Likewise, advise them in regard to the proposals that would not be to the best health interests of the people. "See your man" and help him to be a well-informed representative from your district.

## UNITED IN MEDICINE

It is certainly a truism that the greatest inroads made into medical practice have been attempted always during periods of economic depression and social unrest.

Had it not been for strong, efficiently run medical societies in California, many infringements upon the rights of the practicing physician already would be in existence: corporations probably would be practicing medicine; tax-supported hospitals would be caring for patients who rightfully should employ their own physicians; patent medicine drug venders would be multiplied one hundredfold; chiropractors and naturopaths would have equal rights in medical practice with doctors of medicine and would be compulsory appointees to industrial compensation commissions and hospital staffs of State institutions. Were it not for strongly centralized medical groups, antivivisection laws probably now would be in effect with much pharmacological research at a standstill.

As a result of the efforts of medical groups, many fake cancer, physiotherapy, venereal, and other clinics have been closed. The public has been saved thereby much useless suffering, expense, and loss of health.

Simultaneously, standards of medical practice have been raised and malpractice insurance rates to ethical physicians lowered.

Despite the splendid work that has been done in the past, the medical profession is now confronted by both economical and ethical problems toward which all worthy practitioners should present a united front. I refer to such questions as social health insurance, panel insurance, compulsory state health insurance, standardization of private medical practice, further standardization and control of clinics and dispensaries, more practical methods of caring for indigents, and so forth.

The County Medical Society is the logical forum through which the ethical physician can crystallize his thinking, writing and talking, not only on subjects of scientific interest but also on matters of economic import and public welfare. The strength of the voice of organized medicine already has been felt in matters affecting the common weal. There are in San Francisco County only a few eligible physicians who are not at present affiliated with the society. These men have much to gain during these trying times for themselves and medicine by standing squarely with their fellows in medical society affiliation.

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## COMPONENT COUNTY MEDICAL SOCIETIES

### CONTRA COSTA COUNTY

The annual business meeting of the Contra Costa County Medical Society was held at the Hotel Carquinez, Richmond, on Tuesday evening, November 13. The meeting was called to order by Dr. Melvin M. Stauffer, over the dinner table, at 7:45 o'clock.

Dr. L. H. Fraser, who has been appointed chairman of the evening for the annual party to be held in December, made excellent suggestions for the success of the event. Doctor McCullough made a motion, which was seconded by Doctor Ford, that Doctor Fraser's suggestion that the party be a formal dinner dance, and held on December 8 at the Berkeley Country Club. The motion carried unanimously.

Doctor McCullough made a motion, seconded by Doctor Ford, that the society have a stag barbecue in the springtime at some suitable place to which the men who had accepted the invitation of the society to speak before them might be invited to attend, the Committee on Arrangements to consist of Doctors Christopher Leggo, Harry Ford, William Powell, and U. S. Abbott. The motion carried. Dr. U. S. Abbott wished it noted upon the minutes that he did not regard it as constitutional for this year's body to make arrangements for a social event for the coming year.

Dr. S. N. Weil, chairman of the Nominating Committee, announced the result of the work of the committee: President, W. S. Lucas; vice-president, Henry Ford; secretary-treasurer, Clara H. Spalding; censor for 1935-1937, William Powell; delegate to the State convention, U. S. Abbott; alternate-delegate, Kaho Dayli.

Doctor McCullough moved, Dr. S. N. Weil seconded, that the decision of the committee be accepted *in toto*, and the secretary was ordered to cast a ballot for the society. Carried.

Reports of the standing committees for the year were:

**Committee on Public Policy and Legislation.**—Dr. Harry Ford, chairman, reported the year's activities. These were manifold, and the fact that the two initiative measures, known as No. 9 and No. 17, Chiropractic and Naturopathic, respectively, were so decisively defeated in the recent election, vouches for the importance and effectiveness of the work of the committee. Dr. U. S. Abbott, also a member of the committee, warned of the necessity of alert attention to very important legislation now pending.

**Health and Public Instructions.**—Dr. S. N. Weil reported that some addresses had been made before Parent-Teachers' organizations with beneficial results, he believed.

**Membership.**—Dr. Clara H. Spalding reported that the results this year had not been very gratifying, but that hopes were held for more new members in 1935, as several have signified their intentions of applying soon after the new year.

**History and Obituary.**—Dr. J. B. Spalding, chairman, reported the loss, through death, during the past year of honorary member Dr. Levi St. John Hely, and active member, Dr. Claude Leech. Doctor Spalding suggested that all stand in silence for a moment, in reverence to these splendid confrères.

**Advisory Committee to the Woman's Auxiliary.**—In the absence of Dr. M. L. Fernandez, Dr. S. N. Weil reported.

**Public Relations.**—As this committee is served by Doctor Ford as chairman, as well as the Committee on Public Policy and Legislation, Doctor Ford reported on both committees at the same time.

The "Pierce County Plan" was discussed by Drs. Stauffer, Ford, Abbott, Dozier, Rosa Powell, and McCullough. Doctor Ford made a motion, which was seconded by Doctor McCullough, that the local secretary inform the secretary of the State Association that the Contra Costa County Medical Society wishes to cooperate with the latter body in every way possible in attempting to develop a plan for the care

of the semi-indigent; that the society is thoroughly aroused; the Committee on Public Policy and Legislation and the Public Relations Committee are working on such plans. This motion was carried. Suggestion was made that this Pierce County Plan be reviewed and condensed by the secretary and a mimeographed copy be sent to every member of the society.

Correspondence was read by the secretary: Letters from the California Medical Economic Survey; from Dr. Eugene Hall of San Bernardino, relative to SERA; from Dr. Emmett Clark, pertaining to his training school for office attendants.

The annual reports of the secretary-treasurer's offices were presented. Motion was made by Dr. U. S. Abbott, and seconded, that the reports be accepted and that a rising vote of thanks from the society be accorded the secretary-treasurer. This carried.

The meeting was adjourned at 10 o'clock by Doctor Stauffer.

CLARA H. SPALDING, Secretary.

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### HUMBOLDT COUNTY

The Humboldt County Medical Society met on the evening of October 18 at St. Joseph's Hospital, with O. R. Myers presiding. Eighteen members and fifteen nurses were present.

Doctor Norman, chairman of the Medical Jurisprudence Committee, reported regarding the local broadcast against Initiatives 9 and 17. The society voted to distribute five thousand cards, issued by the society, against the same bills and carry cards in the local papers.

The guests of the evening were Dr. Amos Christie of San Francisco, who spoke on *Anemia in the Infant and Child*, and Dr. Ernest H. Falconer of San Francisco, who talked on *Anemia of the Adult*. These subjects were excellently discussed and enjoyed by our members.

It was announced that we would have our regular election of officers at our meeting in November.

LAWRENCE A. WING, Secretary.

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### ORANGE COUNTY

**Special Meeting.**—A special meeting of the Orange County Medical Association was held on Tuesday, October 23, in the chapel of the Orange County Hospital. This was called at the request of the Orange County Division of the Public Health League. Present also were members of the Woman's Auxiliary, Nurses' Association, several newspapermen, as well as prominent lay people. Dr. L. A. Allison of Los Angeles gave a stirring address against Initiatives Nos. 9 and 17. On motion of Dr. H. Johnston of Anaheim, it was unanimously resolved that the Orange County Medical Association go on record as being opposed to Initiatives Nos. 9 and 17 and, moreover, that a copy of this resolution be given the Public Health League, to be used in any way they saw fit in their publicity campaign against these measures.

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**Regular Meeting.**—The regular November meeting was held at the usual meeting place on November 6. Doctor Baker of the Medical Economics Committee reported progress in the study of the San Fernando plan and its applicability to our needs in Orange County. More was heard of the campaign conducted by the Public Health League. Doctor Nall furnished a financial report. A first reading of the application of Dr. Russell Johnson of Westminster was heard. Dr. Arthur B. Wade of Santa Ana was elected to membership. The district councilor of the first district, Doctor Roblee, was with us and talked on several important matters affecting the California Medical Association. The matter of "gyp" collecting agencies was brought up, and after one man revealed his difficulties, fully half of the members present confessed to similar experiences. It was then unofficially decided to report all cases to the secretary, who would



in turn convey the details to the State Board of Medical Examiners. Dr. George S. Sharp of Pasadena gave the scientific paper of the evening. His subject was *Diagnosis and Treatment of Malignancies of the Head and Neck*. His talk was beautifully illustrated with lantern slides. After considerable discussion the meeting adjourned.

WALDO S. WEHRLY, *Secretary*.

#### SANTA BARBARA COUNTY

The regular meeting of the Santa Barbara County Medical Society was held on Monday evening, November 12, in the Bissell Auditorium of the Cottage Hospital.

Both President Markthaler and Vice-President Van Paing being absent, the meeting was called to order by Dr. H. J. Ullmann.

Dr. Clyde Emory of the Radiation Laboratory of the California Institute of Technology gave a most interesting and instructive talk on four years' experience in treating malignancies of the prostate with high-voltage tubes. The paper was discussed by Drs. Robinson, Ullmann, and Wills.

Doctor Gray reported for the Committee on Communicable Medical Service, stating that definite arrangements had to be made regarding financing, and that unless the society was practically unanimous in endorsing the action of the committee the plan should be rejected.

It was voted that the subject be considered at the December meeting. WILLIAM H. EATON, *Secretary*.

#### SAN JOAQUIN COUNTY

The regular monthly meeting of the San Joaquin County Medical Society was called to order in the Medico-Dental clubrooms, Stockton, November 1, at 8:20 p. m. by Dr. P. B. Gallegos.

The purpose of two board of directors' meetings was the furnishing of the San Joaquin County Chapter of the California Public Health League with a sum, not to exceed \$450, for purposes of defraying advertising in the papers against Initiatives 9 and 17.

Dr. T. C. O'Connor of Bret Harte Sanatorium gave a report on the formation of the Motherlode Medical Society, whose members are to consist of the allied branches of healing. This society is for better understanding of the other profession's viewpoint and for binding the professions together in the event of further legislation.

Mr. Paul Riordon presented the entrance of Lloyds Insurance Company into the field of professional insurance. Drs. Dewey Powell and P. B. Gallegos gave a glowing account of the help that the Medical Protective Insurance Company, Fort Wayne, had been to them in their recent trials.

Dr. C. A. Broaddus presented a report on the activities of the San Joaquin County Chapter of the California Public Health League, and urged that every member of the medical society sign and mail, without fail, the fifty cards sent them by the California Medical Association. He also stated that the dental society had put \$50 at the disposal of the local Chapter in the fight against Initiatives 9 and 17. He urged that every member of the medical society who is not already a member of the California Public Health League immediately sign up so that we could have more people behind us in our fight.

Dr. P. B. Gallegos gave a report on the survey being conducted by the California Economic Survey, and stated that any members who had lost their blanks could obtain a new one from the secretary.

The nomination of officers for the year of 1935 was the next business transacted.

The scientific paper of the evening was given by Dr. Carl Hoag of San Francisco, who presented a very interesting and instructive dissertation on *Common Surgical Problems, with Special Reference to Appendicitis*. This paper was extremely well presented and very

well received by the members present. Doctor Hoag commented on Doctor Dameron's pioneer work in *Non-drainage of the Abdomen*. This paper was discussed by Doctors Dameron, Chapman, Doughty, C. V. Thompson, Sanderson, Lynch, Gallegos, Broaddus, Dewey Powell, and Hoag.

There being no further business to be brought before the society, the meeting was adjourned at 10:45 p.m. and refreshments were served.

G. H. ROHRBACHER, *Secretary*.

#### SONOMA COUNTY

The Sonoma County Medical Society held a very enthusiastic and well-attended meeting on November 8 at the Mark West Springs Hotel. Thirty members and guests were present. Dr. E. J. Finnerty of Sonoma, president of the society, presided.

Dr. Thomas E. P. Gocher of San Francisco, surgical adviser for the Aetna Life Insurance Company and affiliated companies, gave an interesting, worthwhile and highly instructive talk upon the *Treatment of the Sympathetic Nervous System and Its Effect on Post-operative and Post-traumatic Industrial Injuries*.

Reports of the activities of the members of the society in the late political campaign were made, official and unofficial communications were read. Two applications for membership were received.

By a rising vote, the secretary was instructed to indite a letter of sympathy and condolence to Mrs. Phillips, who has recently suffered the loss of her husband, Dr. P. T. Phillips, an honored member of the medical fraternity of the State.

Other routine business was transacted. Dr. Gocher also presented a paper on the observations being made in the cases of lead poisoning in industrial work.

An excellent dinner was partaken of, and all members expressed their enthusiasm and gratitude for the work our society is doing. W. C. SHIPLEY, *Secretary*.

#### TULARE COUNTY

A regular meeting of the Tulare County Medical Society was held at Motley's Café on Sunday evening, October 28. Dinner preceded the educational program.

Dr. J. R. Hicks, vice-president, called the meeting to order. Among the communications read was one from the chairman of a committee appointed in San Bernardino County relative to the question of medical services rendered in the Government's SERA program. No definite plan of action was taken by the society at the present, though it was the general expressed opinion that some plan of payment for services rendered should be worked out.

The Initiatives Nos. 9 and 17 on the coming ballot were brought to the attention of the members, and a report was heard of the publicity afforded these measures in our various communities of Tulare County.

The University of California postgraduate clinical sessions to be held in Fresno, beginning November 2, were brought to the attention of the members. It was urged that as many attend these meetings as possible.

The educational program consisted of an illustrated talk by Dr. Nelson P. Anderson, dermatologist from Los Angeles. He presented a very able discussion of *The Diagnosis and Treatment of the More Common Skin Diseases*.

KARL F. WEISS, *Secretary*.

#### VENTURA COUNTY

The County Medical Society members and their wives were invited to the Billwhack Dairy farm, in Aliso Canyon, for an inspection tour of the dairy, and a barbecue.

The trip through the dairy barns was very instructive and interesting, after which a very fine barbecued supper was enjoyed in the patio of the manager's home.

FRED A. SHORE, *Secretary*.

## CHANGES IN MEMBERSHIP

## New Members (27)

*Alameda County.*—Carl Donald Benninghoven, James B. Graeser.

*Fresno County.*—Willis Bird, Olline B. Doyle, Luther G. Price.

*Los Angeles County.*—Benjamin S. Hollombe, Clayton H. Palmer, Floyd H. Racer, Edwin P. Wallace.

*Napa County.*—Phillip H. Wells.

*Orange County.*—Arthur B. Wade.

*San Francisco County.*—Edmund F. Anderson, Lois H. Brock, John Morris Carter, Herbert L. Dryfoos, Roberto F. Escamilla, Harris M. Fishbon, Thelma G. Harmon, Edmund J. Mahon, Morris H. Silverberg, Thad John Whalen.

*Santa Barbara County.*—Laurence E. Heiges, Jr., Robert W. Hunt, Robert W. Lambuth, Lee Henry Streaker.

*Santa Clara County.*—Don Carlos Hines, James Ward Slattery.

## Resigned (1)

Wilbur Bailey, from San Francisco County.

## In Memoriam

**Lamkin, Burt B.** Died at Fresno, October 22, 1934, age 58. Graduate of the College of Physicians and Surgeons of San Francisco, 1902. Licensed in California, 1903. Doctor Lamkin was a member of the Fresno County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

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**Phillips, Percy Todd.** Died October 29, 1934, age 66. Graduate of the Western Reserve University School of Medicine, Cleveland, 1889. Licensed in California, 1899. Doctor Phillips was a member of the Santa Cruz County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

## OBITUARIES



**Percy Todd Phillips**  
1868-1934

Percy Todd Phillips died at his home in Santa Cruz after a long illness on November 29, 1934.

He had lived and practiced in Santa Cruz for thirty years, and in that time had devoted himself to the welfare and health of the people of his community and to the affairs of his profession through his untiring efforts in the California Medical Association and as a member and president of the California State Board of Medical Examiners.

He was made president-elect of the California Medical Association at Oakland in 1926 and president in 1927-1928.

In all of his offices in the Association he was indefatigable in seeking the good of the Association and the betterment of medicine and the physicians in California, and his service on the Board of Medical Examiners was marked by the same ability, judgment, and sense of responsibility that we in the California Medical Association had found to be characteristic of him.

His family, all of his patients, and many other people of his neighborhood and the California Medical Association will miss him and his kindness, capability and conscientious devotion to his chosen work.

*Therefore, Be It Resolved,* That the Council of the California Medical Association express its sorrow at his death and its consciousness of the loss that organized medicine has suffered, and direct that this resolution be spread upon the minutes, and a copy sent to his family.

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**Stanley Stillman\***  
1861-1934

California's best beloved surgeon has gone. He died of bronchial pneumonia, October 15, 1934. . . .

Stillman's nature was a complex of qualities not easily to find duplicated—proud, independent, critical, even irascible; yet kindly, sensitive as a woman, sympathetic to the point of tears in the presence of a pathetic situation.

As a surgeon, he was not merely competent and skillful, but was gifted with an extraordinary human understanding, as honest, too, with himself as in his professional relations. He was not a student in the usual acceptance of that word, but he was an acute observer and apt to be as much interested in the personality of his patient as in his malady. It is a pity that Stillman contributed so little to surgical literature, for with a mental make-up peculiar to himself he could have reached a far wider audience than that of the classroom, and his message would have been worth while.

As a teacher, he had a great knack of painting word pictures which have become almost proverbial in his students' memories. His students adored him, even when savagely critical, as he sometimes was, for they could not but rise to his sterling honesty and his uncanny instinct which dictated his action and his words.

His father was Dr. J. D. B. Stillman, a pioneer physician and surgeon of California, who, with Dr. John F. Morse, operated, I believe, the first hospital in the State, the first two-story building in Sacramento. He was family physician to Governor Stanford and other

\* This obituary consists of some paragraphs from a sketch by Emmet Rixford, M. D., in the *Bulletin* of the San Francisco County Medical Society.

prominent people of the time; wrote for the Governor the text of his book, "The Horse in Motion"; did much for San Francisco's public schools in the early days.

Stanley was born in Sacramento August 23, 1861, attended the Boys' High School in San Francisco when it was on Powell Street, near Clay. He then entered the University of California in the class of 1882. He was not graduated, for at the end of his second year he was taken to Redlands, California, by his father and put in charge of the old gentleman's vineyard. After three years of ranching, pruning and cultivating grape-vines, driving four-horse team, etc., he broke away, much against his father's will, and entered Cooper Medical College. He was graduated in 1889.

He soon entered the teaching staff and was made professor of surgery in 1898, which position he held until Cooper College had graduated its last class (1912). In 1909, when Stanford University organized its medical faculty, Stillman was made professor of surgery and executive head of the surgical department. He continued in this position until retirement under the regulations of the University, when he reached the age of sixty-five. Following his retirement he spent much of his time in travel, but more recently passed his summers at The Cedars, a club near Summit Soda Springs, his winters in his beautiful place at Belvedere, where he took supreme delight in his garden. . . .

## CANCER COMMISSION\*

### II†

#### II. Tumors of the Small Intestine

##### INTRODUCTION

Malignancy of the small intestine is rare, comprising approximately 7 per cent of all intestinal cancers. Until recently they have been diagnosed relatively late, but should be recognized earlier. One author found 37 per cent had symptoms leading to the diagnosis and 46 per cent were asymptomatic. Early diagnosis, of course, is essential for cure.

##### A. RECOGNITION.

1. *Symptoms*—variable, dependent upon degree of obstruction and, as a rule, they are recurrent in attacks.

(a) *Pain*—diffuse, shifting in character, usually in mid-abdomen, dull and aching or sharp and cramp-like.

(b) *Nausea and vomiting*—present, but not marked. Often unassociated with any severe pain.

(c) *Malaise, anorexia, and loss of weight*—are the symptoms of the gradual increasing tumor.

(d) *Borborygmi and patterned intestinal distention*—frequently observed.

(e) *Blood*—vomited or passed per rectum may occur.

(f) *Secondary anemia and cachexia*—due to loss of blood as well as invasion of other viscera.

(g) *Jaundice*—if tumor arises in the duodenum.

##### 2. Physical Findings.

(a) *Distention*—usually constant, increased at times and often patterned and occupying the central abdominal area.

(b) *Peristalsis*—active, visible, and audible. With the stethoscope definite peristaltic rushes with staccato booming noises as the gas passes the point of obstruction.

(c) *Abdominal mass*—palpable, often inconstant in presence and quite often freely movable.

##### 3. Laboratory Aids.

(a) Blood count—for evidence of anemia.

\* The Cancer Commission was brought into being by the House of Delegates of the California Medical Association to aid in the furtherance of all efforts to combat cancer. The roster of officers and the central office of the Commission to which communications may be sent is printed in this issue of CALIFORNIA AND WESTERN MEDICINE (see front cover directory). This is one of a series of reports by special committees of the California Medical Association.

† Part I of this report was printed in the November issue, page 348.

(b) Gastric analysis—for evidence of emptying time, any persisting content and the presence of blood.

(c) Stool examination, under proper control—for occult blood.

(d) Roentgenographic study—for evidence of stasis or filling defect.

##### B. PERTINENT QUESTIONS.

##### 1. What constitutes an adequate investigation?

(a) A painstaking history as to above symptoms.

(b) Repeated studies of the abdomen, especially one hour after a meal for the type of peristalsis and direction of same.

(c) Laboratory studies as outlined.

##### 2. What constitutes a proper investigation by x-ray?

Fluoroscopic as well as a serial film examination taken every hour for five hours following an opaque meal. A barium meal composed only of barium and water is preferred by some. The points to be observed are any persisting dilatation of the lumen, delay in the progress of the meal, and any defect of a filling or outpocketing type.

##### 3. Of what significance are negative x-ray findings?

Statistics show, up to the present time, that malignant lesions of the small intestine when demonstrated by x-ray have been usually inoperable. Therefore, a negative gastro-intestinal series does not rule out malignancy of the small bowel.

##### 4. In a suspected, but not proved, tumor of the small intestine, should exploration by surgery be employed?

Yes. Since an early exact diagnosis is difficult, if success is to be attained, thorough investigation before inoperable metastases have occurred is necessary.

##### 5. What is the proper operative procedure in a tumor of the small intestine?

(a) *When not definite* an exploration by direct vision and palpation of the entire length of the small intestine, including, of course, the duodenum, which is often overlooked because of its fixed position.

(b) *When definite.*

(1) If acutely obstructed and in poor condition, only an enterostomy, followed later by resection with side to side or end to end anastomosis by any of the recognized closed or open methods.

(2) If not acutely obstructed, preferably an immediate one-stage resection and anastomosis with, or without, a proximal enterostomy.

(3) If resection is unwise because of the extent of metastases, a side-tracking anastomosis about the tumor may give relief from any obstruction for the remainder of life.

(4) If the tumor should be of a lymphosarcomatous type, roentgen-ray therapy, not surgery, should be employed.

##### 6. Should a lymph node ever be removed for diagnosis?

Yes, always, for experience has shown that inflammatory tumors are frequently mistaken for cancer and an established diagnosis of lymphosarcoma calls for x-ray therapy with reasonable prospect of materially prolonged, comfortable life.

##### 7. Is pre- and postoperative care of any special importance?

Yes. Since the diagnosis is usually made on symptoms of obstruction, which interferes with the patient's fluid and acid base absorption and loss, special attention to the sodium and chlorid ion content and the fluid demand must be made. Also the use of the gastric and duodenal lavage and drainage via the nasal tube, postoperatively, prevents accumulation of the upper gastro-intestinal content and gives rest to the operated area, insuring thereby a smoother and safer convalescence.

##### C. THE TYPES OF MALIGNANCY.

1. *Carcinoid tumor.* This is an epithelial tumor considered by some as non-malignant, but by others as similar to basal-cell carcinoma of the skin, since it extends only by local invasion and metastasizes very rarely.

2. *Adenocarcinoma.* A glandular outgrowing tumor, frequently arising on the basis of a polyp. Ulceration occurs early, and metastases, as found with the present stage of diagnosis, occurs in approximately 53 per cent of instances. Prognosis is best when the growth



is in the jejunum and least favorable when in the ileum.

3. *Sarcoma*. Occurs as an annular lesion, but expansive type of growth involves all coats.

4. *Lymphosarcoma (malignant lymphoblastoma)*. Characterized by gross involvement of the local lymph nodes, invasion of the intestinal wall from the mesenteric side, tendency to encircle the lumen and frequently occurs in multiple lesions.

(To be continued)

## THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION\*

MRS. PHILIP SCHUYLER DOANE ..... President  
MRS. ELMER BELT ..... Editor and Chairman of Publicity

### State Auxiliary News

**Election Efforts.**—From every county Auxiliary, reporting in the recent months, came evidence of keen realization of the grave dangers that lay in the Chiropractic and Naturopathic Initiatives 9 and 17. Programs featured speakers telling of the full intent and significance of these proposals, and plans for carrying this information to the voting public and of otherwise assisting in the defeat of these measures were discussed and put into effect with earnest effort. Now that the ballots are in and counted, our members are rejoicing in the thought that their help played some part in the final rejection of these bills. Typical of the auxiliary's aid, is the work done by the counties of Alameda and Los Angeles. Mrs. William H. Sargent, Alameda's energetic president, and her co-workers sent out the amazing total of seventy thousand letters to the voters of the bay district. In Southern California, Mrs. John V. Barrow, Los Angeles County president, also did a magnificent piece of work. Believing that a direct, individual appeal was a most effective method of approach, Mrs. Barrow chose from the auxiliary ranks members who hold an outstanding position in each major organization of women in the city. The auxiliary members then sent letters with personally written salutations and signatures to every member on each club's roster; committees addressed them, and fourteen thousand were thus mailed. Other auxiliary members addressed another six thousand to the voters of the county. Then to help the Public Health League gather the finances necessary for the printing and mailing expenses of the letters used in the campaign, Mrs. Barrow organized and directed a group of fifty-three of the younger members in an office-to-office canvass for contributions covering the entire city. For the acute cases of writer's cramp and weary feet that developed during the thick of the fray, victory is sweet remedy.

**Appointments and an Appreciation.**—Completing the state roster of officers and directors, President Doane announces the appointment of Mrs. J. F. Conzelmann of Stockton as counselor for the fourth district and of Mrs. Frederick F. Gundrum of Sacramento as parliamentarian. This brings the official family of the State organization to twenty members.

Dr. Frederick C. Warnshuis, who, besides his post as secretary-treasurer of the California Medical Association, is on the advisory board for the auxiliary, met with Mrs. Doane and the convention chairman,

\* As county auxiliaries to the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. A. Elmer Belt, chairman of the Publicity and Publications Committee, 2200 Live Oak Drive, Los Angeles. Brief reports of county auxiliary meetings will be welcomed by Mrs. Belt and must be sent to her before publication takes place in this column. For lists of state and county officers, see advertising page 6. The Council of the California Medical Association has instructed the editor to allocate one page in every issue for the Woman's Auxiliary notes.

Mrs. Frederick N. Scatena of Sacramento, for a conference in San Francisco on the plans for the State convention in Yosemite in the spring.

Adopted at the governing council and signed by Dr. Kendall Emerson, comes this expression of thanks to the California State and Los Angeles County Auxiliary boards who formed the Women's Reception Committee under the leadership of Mrs. Philip Schuyler Doane at the recent convention in Pasadena:

"Resolved, That the officers and members of the American Public Health Association present at its sixty-third annual meeting in Pasadena are particularly grateful for the charming arrangements which have contributed so much to the success and pleasure of the meeting, made by the Women's Reception Committee through its chairman, Mrs. Philip Schuyler Doane."

### County Auxiliary Reports

**Alameda County.**—The Woman's Auxiliary to the Alameda County Medical Association held its regular meeting on Friday, September 21, at the Women's Athletic Club, Oakland, at one o'clock. Following the luncheon, *Juvenile Delinquency* was discussed by Mr. Leonard Meltzer, attorney, from the standpoint of the law, and by Mrs. Otis Lloyd Lamson of Seattle, from the humanitarian point of view. It was a pleasure and inspiration to hear Mrs. Lamson discuss this subject which is so close to her heart, and then as second vice-president in the National Auxiliary have her give definite suggestions as to how we may aid the medical profession. Our own state president, Mrs. Philip S. Doane, who had been resting in Carmel, motored up for the occasion and brought us a sparkling and crisp greeting. Due to the length of our program she was reluctant to speak longer; however, we have extended to her a cordial invitation to return soon and to present her plans for the coming year.

The chairman of the Nominating Committee, Mrs. Carl Bowen, and the chairman of the Revisions committee, Mrs. Thomas Clark, gave the first reading of their reports which will be voted upon at the November meeting. The 125 members present were unanimous in their praise of this excellent meeting.

On Tuesday evening, October 23, at the Women's Athletic Club, Oakland, the Alameda Auxiliary were hostesses to their husbands at the annual dinner. Mrs. William H. Sargent, president, after welcoming the guests, called upon Dr. Frank Baxter, president of the Alameda County Medical Society, for a greeting from the society. He briefly reviewed the assistance the auxiliary had given to them in the past, and asked for help in defeating Initiatives 9 and 17 on the ballot for the November election. After the introduction of the guests at the speakers' table a musical program followed. One of the objectives of the auxiliary is to further a more friendly feeling among the doctors and their families. Judging from the increased attendance each year and the friendly atmosphere present, we feel that we are accomplishing this. There were 175 reservations.

MRS. WILLIAM H. SARGENT, President.

**Los Angeles County.**—The October luncheon at the Hollywood Knickerbocker on the 16th was followed by a busy and enthusiastic session. Mrs. John V. Barrow, president, had asked Dr. Lowell S. Goin to explain Initiatives 9 and 17 of the November ballot, which he did with clarity and force. Dr. John W. Crossan spoke for the Public Health League and asked the auxiliary to collect funds for the League, to be used to meet the printing and mailing cost of the campaign against these measures. The report of the Nominating Committee was read by the chairman, Mrs. W. H. Olds. The address of the day upon *Eugenics* was given by Dr. Arthur D. Houghton, Fellow of the Royal Horticultural Society, physician and scientist, who held the interest of every listener with his comprehensive survey and able illustrations.

Three teas have added to the county activities during the month. On October 12, Mrs. Mark Glaser, Hygeia chairman, invited to her home the local state and county officers, Parent-Teachers Association representatives, and her committee, to discuss ways and means of promoting the giving of *Hygeia* subscriptions and of *Healthyland* as holiday remembrances. On October 19 the Santa Monica Bay group of the county entertained at the home of Mrs. Raymond Sands. Officers and directors of both state and county were there to meet the members from this residential district. Music, tea, and much gay conversation made the afternoon delightful. On November 8, Mrs. T. E. McGuire of Sunset Canyon Drive, assisted by other Burbank hostesses, welcomed to her home many members from North Hollywood, Van Nuys, San Fernando, Glendale, Burbank and other districts of the San Fernando Valley, to meet Mrs. John V. Barrow and her board. Talks by Mrs. Barrow and Mrs. James F. Percy on past and future projects, songs by the talented daughter of the hostess, and friendly bits of discussion over the teacups are pleasant memories of the day.

MRS. ELMER BELT, *Corresponding Secretary.*

**Sacramento County.**—The first regular meeting of the fall season was held at the home of Mrs. H. J. Davis, with the president, Mrs. Howard Hall, presiding. Reports from the treasurer and the membership chairman were heard. Mrs. Frank Krull reported on the work done at the county hospital, which is proving very successful, the patients are enjoying the reading matter, and the committee asked for more books and magazines, and also for more workers. Mrs. Scatena reported on State affairs and Mrs. Henderson asked for volunteer workers for the Community Chest drive. After the business meeting, bridge was enjoyed and later refreshments served by Mrs. Davis and the assisting hostesses, Mrs. Howard Hall, Mrs. E. O. Brown, Mrs. Philip Young, Mrs. W. W. Kress, and Mrs. D. McLean.

The October meeting on Tuesday the 16th was a tea at the Del Paseo Country Club. Mrs. Robert Peers of Colfax was the hostess and the occasion honored our illustrious member, Mrs. A. M. Henderson. Reservations were made for fifty-five members. The meeting was called to order by the president, Mrs. Howard Hall. All business was dispensed with except for an urgent message from the doctors to work and vote against Initiatives 9 and 17 at the November election. Mrs. H. Kanner sang, accompanied by Mrs. Zue Pease. Miss Cornelia Provines gave the address of the afternoon, entitled *Robinson Jeffers and Eugene O'Neil—A Comparison and Contrast.* Tea was then served and a social hour ensued.

MRS. FRANK P. BRENDEN,  
*Corresponding Secretary.*

**San Diego County.**—The membership drive, which began in September, has brought in four doctors' wives, who joined the ranks at the October meeting. Dr. L. C. Kinney, the speaker of the day, reviewed pending legislation and explained the Initiatives 9 and 17.

MRS. BEN F. EAGER, *Secretary.*

**Santa Barbara County.**—The Woman's Auxiliary to the Santa Barbara Medical Society met at the home of Mrs. Harold Schwalenberg on Friday, October 5, at three o'clock. Mrs. Van Paing presided, and there were eleven members present. As part of our health program for the year, Mrs. Henderson moved that each member subscribe to *Hygeia*, mark each article of interest for school use, and pass it on within a month to one of the public schools in the city. Mrs. Holzman was named *Hygeia* chairman. Mrs. H. F. Pierce, the Program chairman, asked for an expression of interest in hearing the three-unit health plan as well as the district plan presented by the advocates of each, and it was decided to ask the doctors to explain each of these plans. Dr. William Remfry Hunt,

a member of the Advisory Council, reviewed the need for specific measures being taken to diagnose potential criminals. He suggested that a behavior record as well as a physical one be kept by all schools. Dr. Elizabeth Bishop, director of research at the Santa Barbara College, presented some interesting case histories, bearing out the fact that if recognition of mental symptoms is made early, much can be done to prevent the individual from becoming a menace to society. Dr. Edward Lamb, school physician, gave a good idea of how the application of various health measures, preventive principally, worked out in the city schools. He suggested as the first step in our own health program, a request for a visiting nurse whose duty it would be to investigate the home conditions of misbehaving as well as physically inferior children. Tea was served by the hostess, Mrs. Henderson, and Mrs. Findlay presiding.

MRS. WILLIAM REMFRY HUNT, *Secretary.*

**Orange County.**—The Woman's Auxiliary to the Orange County Medical Association held its November meeting at the Ebell Club of Santa Ana on Tuesday, November 6, with Mrs. Hiram Currey acting as chairman of the group of hostesses. This being a reciprocity meeting, representatives of the Federated Women's Clubs of the county were present as special guests. Mrs. Ray Green, chairman of the Committee on Public Relations, welcomed the guests and spoke briefly, explaining the purposes of the auxiliary. Mrs. D. R. Ball, Program chairman, introduced the speaker of the day, Mr. Ben H. Read of the Public Health League of California, who gave an interesting and instructive talk on *Medical Legislation*. He described the methods by which bills are introduced and procedure followed in the legislature before these bills become laws. He stated that about 10 per cent of all the bills introduced have to do with health problems and summarized various bills of this nature to be brought before the legislature in the near future. It was for the purpose of safeguarding the public welfare that the Public Health League was formed as a political organization to represent the medical profession and other allied professions when these bills are introduced. Mr. Read expressed his appreciation of the assistance the women of the auxiliary gave in this recent campaign. Following the business session Mrs. Juanita Ross of Anaheim delighted those present with a group of songs, and members enjoyed a social hour mingling with the guests of the day while the hostesses served tea. Hostesses for the day were Mesdames Hiram Currey, S. Theron Johnston, P. B. Gillespie, H. MacVicker Smith, Lawrence Whitacre, Merrill Hollingsworth, B. W. Hardy, F. M. Findlay, H. C. Nelson, and Newell Moore.

ELIZABETH M. SUTHERLAND, *Secretary.*

## NEVADA STATE MEDICAL ASSOCIATION

HORACE J. BROWN, M.D., Associate Editor for Nevada

E. E. HAMER, Carson City ..... President  
R. O. SCHOFIELD, Boulder City ..... President-Elect  
C. E. SECOR, Elko ..... First Vice-President  
HARRY W. SAWYER, Fallon ..... Second Vice-President  
HORACE J. BROWN, Reno ..... Secretary-Treasurer

### THIRTY-FIRST ANNUAL SESSION OF THE NEVADA STATE MEDICAL ASSOCIATION

#### First Day's Session

The thirty-first annual meeting of the Nevada State Medical Association was called to order at Bowers Mansion by President D. Angus Smith on September 21 at 9:55 a. m. The president's address consisted of a welcome to those present and his wish that the meeting would prove both pleasant and profitable.

## SCIENTIFIC PROGRAM

The scientific session was then taken up and was as follows:

Miley B. Wesson of San Francisco read a paper on *Urinary Calculi, Cause and Treatment*.

Colin C. McRae of San Francisco read a paper on *Some Principles in the Treatment of Fractures of the Forearm*.

Under a special order of business, Thomas W. Bath of Reno read the report on the Committee on Military Affairs.

George L. Stivers of Fall River, Massachusetts, read the paper on *Types of Pleuropulmonary Adhesions*.

William P. Lucas of San Francisco read a paper on *Problems of Growth and Development During Childhood*.

## BUSINESS MEETING

The first order of business was the reading of the minutes of the last annual meeting. On motion of S. K. Morrison, seconded by Fleet H. Harrison, this was dispensed with.

The following named members were elected to membership: Lloyd S. Bambauer of Fernley, I. E. Benveniste and J. M. Kehoe of Boulder City, Louis E. Lombardi, Lawrence Parsons and Rodney Wyman of Reno, Noah Rouse of Carson City, and G. J. Sylvain of Goldfield.

On motion of J. L. Robinson, seconded by A. W. MacPherson, these new members were elected to membership.

The delegate to the American Medical Association reported that he was unable to attend the annual meeting of that body and was unable to find a substitute.

On motion of Fleet H. Harrison, seconded by W. A. Shaw, the following were admitted to honorary membership: Colin C. McRae, George L. Stivers, Lewis Michelson, William P. Lucas, and George Hosford.

**Election of Officers.**—The president called for nominations for president-elect. Thomas W. Bath nominated J. N. Van Meter of Las Vegas, seconded by J. T. Reese. E. E. Hamer nominated Harry W. Sawyer of Fallon, seconded by R. A. Bowdle. Fleet H. Harrison nominated R. O. Schofield of Boulder City, seconded by M. A. Robison. C. E. Piersall moved, seconded by R. A. Bowdle, that the nominations be closed. So carried. The president appointed A. C. Olmsted and George R. Smith as tellers. R. O. Schofield, having received the majority of ballots cast, was declared elected. The following were elected without opposition: first vice-president, C. E. Secor of Elko; second vice-president, Harry W. Sawyer of Fallon; secretary-treasurer, Horace J. Brown of Reno; trustee for three years, Fleet H. Harrison of Minden.

**Necrology Committee Report.**—the Necrology Committee reported the following deaths since the last meeting: R. H. Hawkins of Fallon and F. J. Crane of Reno. Thomas W. Bath read a memorial for F. J. Crane.

**Place of Next Year's Meeting.**—C. E. Secor invited the Association to hold its next annual meeting at Elko. The invitation was extended on behalf of the Elko County Medical Society. Moved by R. A. Bowdle, seconded by M. A. Robison, that the Association accept this invitation. Motion carried.

**Amendment to By-Laws.**—R. A. Bowdle presented the following amendment to the By-Laws to be acted upon at the next annual meeting: An amendment, Article IX, Section 3, of the Constitution. Pertaining to the election of officers of 1935. The first vice-president shall be considered elected to the office of president-elect, beginning at the seating of the new president at the annual meeting in 1936. The second vice-president shall succeed to the first vice-presidency in the same manner and at the same time.

The meeting was adjourned until 9 a. m. September 22, 1934.

## Second Day's Session

The meeting was called to order at Bowers Mansion at 9:45 a. m. by President D. A. Smith.

**Scientific Program.**—R. O. Schofield of Boulder City, Nevada, read a paper on *Industrial Work at Boulder Dam*.

Lewis Michelson of San Francisco read a paper on *Stricture of the Ureter in the Female—Its Diagnosis and Treatment*.

William W. Washburn of San Francisco read a paper on *Malignancies of the Gastro-Intestinal Tract—Some Clinical Aspects*.

George Hosford of San Francisco read a paper on *The Present Status of the Treatment of Strabismus*.

**Introduction of Officers.**—Dr. E. E. Hamer of Carson City was presented and seated as president for the incoming year by the outgoing president, Dr. D. A. Smith of Mina. Doctor Hamer made a pleasing speech of acceptance.

At 8 p. m. the members, guests, and ladies met at the Riverside Hotel, where a splendid dinner dance was enjoyed by all.

**Members in Attendance.**—The following members were in attendance at various times during the meeting: Horace J. Brown, L. S. Bambauer, Thomas W. Bath, R. A. Bowdle, Anna B. De Chene, A. R. Da Costa, E. E. Hamer, Fleet Harrison, W. H. Hood, A. J. Hood, Dwight Hood, D. J. Hurley, T. H. Harper, L. E. Lombardi, Arthur E. Landers, D. G. Lynwalter, F. J. Morley, A. W. MacPherson, S. K. Morrison, A. Miniggio, George Magee, V. A. Muller, A. C. Olmsted, C. E. Piersall, Lawrence Parsons, M. A. Robison, G. Ross, J. L. Robinson, D. A. Smith, W. A. Shaw, John T. Rees, R. O. Schofield, N. Smerhoff, G. R. Smith, Harry Sawyer, D. A. Turner, R. E. Wyman, J. N. Van Meter, M. R. Walker, C. W. West.

The following honorary members and visitors were also present at various times during the meeting: Mrs. L. S. Bambauer, Dr. J. M. Coulter, Dr. C. Harper, Wayne Dillard, E. D. Carville, Dr. Kaspar Pischel, Lester Hilp, Mr. K. E. Kather, A. R. Kilgore, George N. Hosford, I. V. Decker, Thomas Lee, Mrs. H. B. Largent, P. Lucas, H. B. Largent, Jack O'Neill, Colin C. McRae, Lewis Michelson, J. E. Tillotson, George L. Stivers, Burnett Rixford, Max Rothschild, J. B. Rackerby, Richard Travers, Cecil F. Simmons, Miley B. Wesson, W. W. Washburn, A. L. Voelkle.

HORACE J. BROWN, *Secretary-Treasurer*.

## COMPONENT COUNTY MEDICAL SOCIETIES

## WASHOE COUNTY

The Washoe County Medical Society met at the State Building on Tuesday evening, November 13. After the reading of communications the society resolved itself into an informal meeting and discussed the result of the election for hospital trustee, which was held on November 6. The verbal report of the secretary-treasurer was then given. The treasurer, by order of the society, had turned over to the Nevada State Medical Society \$125 to defray balance of expense incurred on the annual banquet; had paid advertising bills to the amount of \$24; and by order of the society had paid two checks of \$100 each to Dr. George L. Servoss, secretary of the Political Committee. A belated itemized report, entitled "The Humphrey Campaign," sent in by messenger, revealed the fact that the society was in debt \$72.21 to the Humphrey Campaign Committee, the committee having spent \$276.19. The secretary said that there were possibly \$15 to \$20 dues yet to come in, and after paying minor expenses the society would enter the year 1935 with an indebtedness of about \$60, which could be met from the usual membership assessment for the incoming year.

The December or annual dinner meeting will be in charge of a committee of three, appointed by President Paradis. This committee is to report back to the society in time sufficient to arrange all details. . . .

THOMAS W. BATH, *Secretary*.



## MISCELLANY

Under this department are ordinarily grouped: News; Medical Economics; Correspondence; Twenty-five Years Ago column; Department of Public Health; California Board of Medical Examiners; and other columns as occasion may warrant. Items for the News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

### NEWS

#### Coming Meetings

*American Medical Association*, Atlantic City, New Jersey, June 10-14, 1935. Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

*California Medical Association, Yosemite National Park*, May 13-16, 1935. Frederick C. Warnshuis, M. D., 450 Sutter Street, San Francisco, Secretary.

*Radiological Society of North America*, Memphis, Tennessee, December 3-7, 1934. Donald S. Childs, M. D., 607 Medical Arts Building, Syracuse, New York, Secretary.

#### Medical Broadcasts\*

*American Medical Association Health Talks*.—The American Medical Association broadcasts on a western network of the Columbia Broadcasting System each Thursday afternoon on the Educational Forum from 4:30 to 4:45, central standard time.

The American Medical Association broadcasts on a Blue network of the National Broadcasting Company each Tuesday afternoon from 4:00 to 4:15 central standard time.

*San Francisco County Medical Society*.—The radio broadcast program for the San Francisco County Medical Society for the month of December is as follows:

Tuesday, December 4—KJBS, 11:15 a.m., and KFRC, 1:15 p.m. Subject: Detection of Tuberculosis by the Tuberculin Test.

Tuesday, December 11—KJBS, 11:15 a.m., and KFRC, 1:15 p.m. Subject: Splinting the Lung.

Tuesday, December 18—KJBS, 11:15 a.m., and KFRC, 1:15 p.m. Subject: Questions and Answers About Tuberculosis.

Tuesday, December 25 and January 1 are legal holidays. No broadcast.

This December series is given with the cooperation of the California Tuberculosis Association as a part of its annual program at this time of the year.

*Los Angeles County Medical Association*.—The radio broadcast program for the Los Angeles County Medical Association for the month of December is as follows:

Saturday, December 1, KFI, 9 a.m. Subject: Medicine and Human Progress, No. 14.

Saturday, December 1—KFAC, 10 a.m. Subject: Medicine and Human Progress, No. 14.

Tuesday, December 4—KECA, 11:15 a.m. Subject: Medicine and Human Progress, No. 15.

Saturday, December 8—KFI, 9 a.m. Subject: Medicine and Human Progress, No. 15.

Saturday, December 8—KFAC, 10 a.m. Subject: Medicine and Human Progress, No. 15.

Tuesday, December 11—KECA, 11:15 a.m. Subject: Medicine and Human Progress, No. 16.

Saturday, December 15—KFI, 9 a.m. Subject: Medicine and Human Progress, No. 16.

Saturday, December 15—KFAC, 10 a.m. Subject: Medicine and Human Progress, No. 16.

Tuesday, December 18—KECA, 11:15 a.m. Subject: Medicine and Human Progress, No. 17.

\* County societies giving medical broadcasts are requested to send information as soon as arranged (giving station, day, date and hour, and subject) to CALIFORNIA AND WESTERN MEDICINE, 450 Sutter Street, San Francisco, for inclusion in this column.

Saturday, December 22—KFI, 9:00 a.m. Subject: Medicine and Human Progress, No. 17.

Saturday, December 22—KFAC, 10 a.m. Subject: Medicine and Human Progress, No. 17.

Tuesday, December 25—KFI, 11:15 a.m. Christmas Day. No program.

Saturday, December 29—KFI 9:00 a.m. Subject: Medicine and Human Progress, No. 18.

Saturday, December 29—KFAC, 10 a.m. Subject: Medicine and Human Progress, No. 18.

**American Medical Association Scientific Exhibit at Atlantic City.**—Application blanks are now available for space in the scientific exhibit at the Atlantic City session of the American Medical Association, June 10 to 14, 1935. The Committee on Scientific Exhibit requires that all applicants fill out the regular application form and requests that this be done as early as convenient. Applications close February 25, 1935. Persons desiring application blanks should address a request to the Director, Scientific Exhibit, American Medical Association, 535 North Dearborn Street, Chicago, Illinois.

**Records for Tuberculosis Sanatoria.**—For the first time it is now possible for tuberculosis sanatoria to keep uniform and complete records of all material facts about their patients, available at all times for instant consultation. This important improvement in health bookkeeping is a result of two years' work done by a committee of the American Sanatorium Association, assisted in a secretarial capacity by members of the staff of the National Tuberculosis Association. The twenty-three new forms which have been prepared are obtainable from the Livingston Press, Livingston, New York.

Formerly it was often necessary, when information of a consecutive or cumulative nature was needed, to expend considerable time and effort to collect and arrange pertinent facts from records made at different times, and reposing in various forms which were kept primarily for other reasons than the one which might now be in mind. The new system has the added advantage in rendering available, as a matter of routine, facts which serve to satisfy statistical needs from a national viewpoint.

**Nineteen Thirty-Five Lane Lectures.**—Gleb V. Anrep, M. D., D. Sc., F. R. S., professor of physiology, Egyptian University, Cairo, Egypt, will deliver the 1935 series of Lane Lectures at Stanford University School of Medicine in April.

The Lane Medical Lectures were established in 1896 by Dr. Levi Cooper Lane of San Francisco, the founder of the Cooper Medical College, which, in 1908, became the School of Medicine of Leland Stanford Junior University.

Every two years some eminent physician or scientist who has made a definite contribution in the field of medicine is secured to give a free course of lectures for medical students and the medical profession at large.

Doctor Anrep will give the twenty-fifth course of Lane Medical Lectures in 1935 from April 22 to 26 inclusive, the five lectures covering different phases of regulation of the cardiovascular system.

These lectures will be given in Lane Hall, Stanford University School of Medicine, Sacramento and Webster streets, San Francisco. Members of the medical profession are invited.

**Narcotic Studies at University of California.**—Opportunity for the further study of several heretofore little known narcotics has been afforded to the department of pharmacology of the University of California since it has been working in coöperation with the Division of Narcotic Enforcement of the State Department of Penology, according to Prof. Chauncey D. Leake.

"The association has been of great mutual advantage," Professor Leake said in commenting on the work between the State Department and the University, which was begun in April of this year. "The staff of the pharmacological laboratory has acquired a vast amount of important information regarding various types of addiction drugs, which is of scientific and medical importance.

"Investigations also have been made of the chemical methods of detecting many types of drugs and stimulants about which little has been known. Through this coöperation the Division of Narcotic Enforcement has not only been able to save a relatively large sum of money for the State, but has also been assured of the most satisfactory sort of scientific aid and advice."

Intensive scientific investigations of certain new relatively unknown, and possibly habit-forming drugs now are being planned in order that the law enforcing body will be prepared to meet circumstances which may arise if their use becomes prevalent.

#### Some New York Problems:

Excerpts from the November Bulletin of the Medical Society of the State of New York:

**"Compulsory Health Insurance.**—On October 27 the American Association for Social Security held a meeting in New York City to consider the 'final' draft of their 'model health insurance bill.' We understand no notable change was made . . . we may anticipate meeting the bill (as per copy sent for your information) when the legislature meets. Now is the time to plan and organize opposition. . . ."

**"Pollak Foundation for Economic Research,** Newton, Massachusetts. Send five cents for Pamphlet No. 28. See what is being done to promote public debate by colleges and high schools on the idea of socialized medicine. The list of reference matter contained in the booklet is worth the price and trouble."

**"Current Popular Magazines.**—Any and all of them! You'll generally find some readable composition constructed on a theme extracted from the 'Cost of Medical Care' background. Read them and observe what is being done to misinform the public and shape popular opinion to a favorable reception of 'socialized medicine.' If you do not want 'panel' political regimentation of your profession, do something more than 'resolve.'"

**"What Can the County Societies Do? Close the Holes in Our Ranks!"**—Adopt the Wayne County slogan—"Get Your Man"—let every member mark a non-member and keep at him until he is in. No team can win with 'holes in the line!'"

**"Why Not?"**—Hold a meeting in each county for non-members. Give them the facts. Make them aware of the approaching crisis. Let them see how abridged the independent opportunity will be under the A. A. S. S. System."

**"In Union There Is Strength."**

(Signed) Committee on Economics, Medical Society of the State of New York.

**New York Polyclinic Medical School and Hospital.** The following program was presented at the Clinical Society meeting at the New York Polyclinic Medical School and Hospital on October 1, 1934:

Treatment of Brain Abscess (lantern slides)—Joseph E. J. King, M. D.

Advantages of Electrosurgical Obliteration of the Gall-Bladder Over Classical Cholecystectomy (motion pictures)—Max Thorek, M. D., Chicago.

The program below was presented at the Clinical Society meeting at the New York Polyclinic Medical School and Hospital on November 5, 1934:

Amebic Dysentery—Damaso de Rivas, M. D., University of Pennsylvania.

The Use of Artificial Pneumothorax in the Treatment of Lobar Pneumonia—Francis G. Blake, M. D., Yale University.

Medico-Zoölogical Aspects of the Race Problem—Colonel C. W. Stiles, United States Army, Washington, D. C.

Dr. Murray B. Gordon, adjunct professor of pediatrics, started a series of six lectures on Endocrinology in Children, beginning on Tuesday, November 13, 1934.

#### This and That:

**One Hour a Month.**—If every member of the California Medical Association would devote but "One Hour" a month for the purpose of doing something for his county and state medical organization, it would be but a comparatively short time before California would evidence desirable and more achieving accomplishments. Think of it—5,640 hours a month of constructive work! What might this effort accomplish?

One hundred per cent organized profession.

Active county units.

Fellowship and friendliness.

Establishing sound public opinion.

Are you dissatisfied with your county organization? What are you doing for it?

Are you dissatisfied with your county program? What are you doing to better them?

Are you dissatisfied with the attendance? What are you doing to increase it?

It is time for the "you's" to become busy.

#### TEN QUESTIONS

(For answers, see below)

1. As a member of your county society and the California Medical Association, what is your standing in the American Medical Association?
2. What restrictions are placed on advertisements relating to remedies or therapeutic drugs?
3. What Council approves hospitals for interne training?
4. Where do you file your license to practice?
5. What precautions should you observe when treating fractures?
6. What are the requirements to become a Fellow of the American Medical Association?
7. After what length of time are claims for malpractice outlawed?
8. What constituent unit determines eligibility in state and national bodies?
9. When have you a right to operate upon a patient without the patient's consent?
10. On what date and where will the Association's next annual meeting be held?

#### TEN ANSWERS

(See above for questions)

1. You are a member of the American Medical Association. To become a Fellow requires an application and payment of \$7 annual dues. The *Journal of the American Medical Association* is sent to Fellows without additional charge.

2. They must be U. S. P. or N. F. preparations or else they must be approved by the Council on Pharmacy and Chemistry of the American Medical Association.
3. American Medical Association Council on Medical Education and Hospitals.
4. With county clerk in the county in which you reside.
5. Secure x-rays before and after reduction, during treatment and on discharge; obtain consultation, keep a case record.
6. See answer to No. 1.
7. Until minor has reached the age of twenty-two. In adults, one year after date of last service.
8. County Medical Society.
9. In an emergency when patient is unconscious and then only after consultation.
10. May 13 to 16, 1935. Yosemite National Park.

## CORRESPONDENCE

Subject of following letter: A communication from the Los Angeles Society of Ophthalmology and Otolaryngology, on the subject of California's care of its needy blind.

To the Editor:—Enclosed please find copy of resolutions passed at the last meeting of the Los Angeles Society of Ophthalmology and Otolaryngology in regard to the needy blind.

I believe these should be brought to the attention of the readers of CALIFORNIA AND WESTERN MEDICINE, and trust that you will find it advisable to publish them in its next issue.

Yours truly,  
PIERRE VIOLÉ, M.D., Secretary.

♦ ♦ ♦

### RESOLUTIONS

*Resolved*, That the Los Angeles Society of Ophthalmology and Otolaryngology go on record as expressing its opinion that the examination blanks now in use by the Division for the Blind of the California State Department of Public Welfare are inadequate, and do not best protect the interests of either the tax-paying citizens or of the really needy blind citizens of California; and be it further

*Resolved*, That the secretary of this Society be instructed to forward copies of this resolution to His Excellency, Governor Frank Merriam, to the Director of the California Department of Public Welfare, and to the Chief of its Division for the Blind; and be it further

*Resolved*, That the constituted authorities of the State of California be requested to work out a new application blank, as authorized by the existing law, for citizens who as blind persons seek aid from state and county treasuries; this blank to be drafted so that the information contained therein will be accurate and valuable and to the joint interests of California taxpayers, needy blind persons, and specialists in diseases of the eye.

## CHIROPRACTORS AND NATUROPATHS DEFEATED\*

Chiropractic and naturopathy received a noteworthy setback November 6, when the people of Arizona, California and Oregon decisively defeated at the polls measures for the aggrandizement of those cults submitted under the initiative system of legislation.

In Arizona the naturopaths wanted an independent naturopathic examining and licensing board. They wished to have naturopaths exempted from the re-

\* See also page 410 for additional comment.

quirements of the basic science law and authority for every licensed naturopath to exercise every right and privilege given by law to any practitioner of the healing art.

In California a schism in the chiropractors of the State sought by an initiative measure to add to chiropractic prerogatives a monopoly of the right to practice physical therapy, by providing for the issue to licensed chiropractors only of licenses to practice physical therapy, authorizing the holders "to practice obstetrics; to use, prescribe and practice prophylactic hygiene and sanitation and dietetics, including, in any form, herbs, oils and all animal and vegetable foods; and to use all systems, methods or instruments in diagnosis, including the use of roentgen rays." Under the chiropractic initiative all licensed chiropractors in the State were to constitute a public corporation, with officers elected by the members, with power to regulate chiropractic practice, to levy dues on its members and to discipline its members. The dominant group of chiropractors in the State publicly denounced the measure, saying that the chiropractic initiative measure of 1922 had vested in them all authority necessary to enable them to practice legitimate chiropractic. Another California naturopathic initiative sought to establish naturopathy by law as a distinct school of healing, with its own independent examining and licensing board. It proposed to organize all licensed naturopaths in the State into a self-governing public corporation. Naturopathy was defined by the measure as including "physiotherapy, physical therapy, phytotherapy, biochemistry, the use of antiseptics, anesthetics, applied therapeutics and prophylactic hygiene and sanitation; the science and art of diagnosis, which enables the naturopathic physician to direct, advise, prescribe, dispense or apply food, water, roots, herbs, plants, oils, lights, heat, color, exercises, active and passive, manipulations, correcting vital tissue, organs or anatomical structures by manual, mechanical or electrical treatment, instruments and appliances, x-ray, or any and all other natural agencies that have been used in the past, that are now in use, or that may be used in the future, to assist nature in restoring a physiological and psychological interfunction for the purpose of restoring and maintaining a normal state of health, mentally and physically."

In Oregon, chiropractors and naturopaths already have their independent examining and licensing boards. A basic science law that went into effect January 1, 1933, however, seems to have given alarm to chiropractors and naturopaths generally, and particularly to a struggling chiropractic school in the State, whose graduates, under the basic science law, were threatened with the necessity of having to show that they had been adequately instructed in anatomy, physiology, chemistry, pathology and hygiene, before an independent board, before they could appear before the chiropractic board for examination. The chiropractors of the State therefore combined with the naturopaths in proposing as an initiative measure an amendment to the State Constitution that would have abolished the examinations in the basic sciences under the Basic Science Law. The measure was so worded as to permit the governing board of the chiropractic and naturopathic bodies to enlarge the scope of practice of their adherents in such a way as to permit them to use drugs and possibly even to enter into the general practice of obstetrics and surgery.

Through the effective work of the state medical associations of Arizona, California and Oregon, and with the aid of many public-spirited citizens both individually and in organizations, the people of these states were kept informed as to the dangers threatened by the proposed initiative measures. As has been mentioned, decisive defeats resulted in each state. The people of Arizona, California and Oregon are to be congratulated on maintaining their standards of medical care. Apparently the majority of the voters recognized the necessity for protection against ignorance, superstition and incompetence in medical care.—Editorial, *Journal of the American Medical Association*, November 17, 1934.



## ROSTER OF THE FIFTY-FIRST CALIFORNIA LEGISLATURE\*

## State Senators

District No. 1, Harold J. Powers (R), Eagleville.  
 District No. 2, Henry McGuinness (D), Dunsmuir.  
 District No. 3, Harry A. Perry (R), R. F. D. 46, Ferndale.  
 District No. 4, George M. Biggar (R), Covelo.  
 District No. 5, John B. McColl (R), Redding.  
 District No. 6, Charles H. Deuel (D), 119 Broadway, Chico.  
 District No. 7, Jerrold L. Seawell (R), Roseville.  
 District No. 8, D. Jack Metzger (R), 641 Main Street, Red Bluff.  
 District No. 9, A. L. Pierovich (D), Jackson.  
 District No. 10, W. P. Rich (R), 424 Fifth Street, Marysville.  
 District No. 11, Frank L. Gordon (R), Gordon Valley, Suisun.  
 District No. 12, Herbert W. Slater (D), 800 Fourth Street, Santa Rosa.  
 District No. 13, Charles F. Reindollar (R), San Rafael.  
 District No. 14, Walter McGovern (R), 2750 Fulton Street, San Francisco.  
 District No. 15, Thomas McCormack (R), Rio Vista.  
 District No. 16, William F. Knowland (R), 860 Grand Street, Alameda.  
 District No. 17, Will R. Sharkey (R), Martinez.  
 District No. 18, Sanborn Young (R), Los Gatos.  
 District No. 19, Thomas P. Scollan (Ind), 2320 X Street, Sacramento.  
 District No. 20, Bradford S. Crittenden (R), 145 E. Harding Way, Stockton.  
 District No. 21, Harry L. Parkman (R), 934 Rosewood Drive, San Mateo.  
 District No. 22, J. M. Garrison (D), Route 1, Box 1826, Modesto.  
 District No. 23, Bert B. Snyder (R), Santa Cruz.  
 District No. 24, Andrew R. Schottky (R), 243 22nd Street, Merced.  
 District No. 25, Edward H. Tickle (R), Carmel.  
 District No. 26, Dan E. Williams (R), Jamestown.  
 District No. 27, Charles King (D), Hanford.  
 District No. 28, Karl P. Keough (D), Bishop.  
 District No. 29, Chris N. Jespersen (R), Atascadero.  
 District No. 30, Ray W. Hays (R), 3261 Balch Avenue, Fresno.  
 District No. 31, Edgar W. Stow (R), P. O. Box 545, Santa Barbara.  
 District No. 32, Frank W. Mixer (R), 303 East Palm Street, Exeter.  
 District No. 33, Walter H. Duval (R), Santa Paula.  
 District No. 34, J. I. Wagy (R), 1909 Second Street, Bakersfield.  
 District No. 35, Nelson T. Edwards (R), Orange.  
 District No. 36, Ralph E. Swing (R), California Hotel, San Bernardino.  
 District No. 37, Leonard Joseph Difani (R), Riverside.  
 District No. 38, Culbert L. Olson (D), 506 So. Mariposa Avenue, Los Angeles.  
 District No. 39, Ben Hulse (R), Imperial.  
 District No. 40, Ed Fletcher (R), 335 Walnut Street, San Diego.

## State Assemblymen

District No. 1, Michael J. Burns (R), 1644 Summer Street, Eureka.

District No. 2, Clinton J. Fulcher (D), Lookout.  
 District No. 3, John H. O'Donnell (D), 118 First Street, Woodland.  
 District No. 4, J. E. Frazier (R), Gridley.  
 District No. 5, Ernest C. Crowley (D), Suisun.  
 District No. 6, Jesse M. Mayo (R), Angels Camp.  
 District No. 7, Hubert B. Scudder (R), 506 S. Main Street, Sebastopol.  
 District No. 8, Roy J. Nielsen (R), 615 21st Street, Sacramento.  
 District No. 9, Earl D. Desmond (D), Route 1, Box 125, Galt.  
 District No. 10, T. H. DeLap (R), 2616 Sonoma Avenue, El Cerrito.  
 District No. 11, Dana P. Eicke (D), 673 Lexington Avenue, Stockton.  
 District No. 12, James E. Thorp (R), Lockeford.  
 District No. 13, James M. Cassidy (D), 1520 89th Avenue, Oakland.  
 District No. 14, Charles J. Wagner (D), 1818 Cornell Drive, Alameda.  
 District No. 15, Leon M. Donihue (D), 2841 Kingsland Avenue, Oakland.  
 District No. 16, Arthur H. Breed, Jr. (R), 101 Sea View Avenue, Piedmont.  
 District No. 17, Henry P. Meehan (D), 646 42nd Street, Oakland.  
 District No. 18, Charles W. Fisher (R), 189 Florence Avenue, Oakland.  
 District No. 19, Gardiner Johnson (R), 2623 Haste Street, Berkeley.  
 District No. 20, Thomas A. Maloney (R), 339 Connecticut Street, San Francisco.  
 District No. 21, Joseph P. Gilmore (R), 442 Excelsior Avenue, San Francisco.  
 District No. 22, Kennett B. Dawson (R), 1150 Clay Street, San Francisco.  
 District No. 23, William B. Hornblower (R), 1530 Guerrero Street, San Francisco.  
 District No. 24, Patrick J. McMurray (D), 3918 26th Street, San Francisco.  
 District No. 25, Melvyn I. Cronin (R), 1251 11th Avenue, San Francisco.  
 District No. 26, Ray Williamson (R), 756 Page Street, San Francisco.  
 District No. 27, Jefferson E. Peyser (R), 2001 California Street, San Francisco.  
 District No. 28, James F. Brennan (D), 26 Fifth Avenue, San Francisco.  
 District No. 29, Frederick Peterson (R), 1702 Broadway, Burlingame.  
 District No. 30, H. Dewey Anderson (R), Box 186, Cupertino.  
 District No. 31, C. C. Cottrell (R), 256 S. 17th Street, San Jose.  
 District No. 32, Hugh P. Donnelly (D), 114 Lyons Avenue, Turlock.  
 District No. 33, James D. Garibaldi (D), 443 22nd Street, Merced.  
 District No. 34, Clifford R. Kallam (D), 441 E. Lake Avenue, Watsonville.  
 District No. 35, Ellis E. Patterson (R), King City.  
 District No. 36, Claude Minard (R), 1886 Del Mar Avenue, Fresno.  
 District No. 37, S. L. Helsing (D), Route 4, Box 96, Fresno.  
 District No. 38, Ford A. Chatters (R), 420 N. Mirage Avenue, Lindsay.  
 District No. 39, Alfred W. Robertson (D), 1524 Dover Road, Santa Barbara.  
 District No. 40, James J. McBride (D), 1647 Poli Street, Ventura.  
 District No. 41, Rodney L. Turner (D), 1117 Jefferson Street, Delano.

District No. 42, Elmer E. Lore (D), 11743 Hamlin Street, North Hollywood.  
 District No. 43, C. Don Field (R), 1552 N. Ridgeway Drive, Glendale.  
 District No. 44, John B. Pelletier (D), 256 So. Bunker Hill Avenue, Los Angeles.  
 District No. 45, Charles A. Hunt (D), 2647½ Griffin Avenue, Los Angeles.  
 District No. 46, Ralph W. Evans (D), 6743 Second Avenue, Los Angeles.  
 District No. 47, Eleanor Miller (R), 251 S. Oakland Avenue, Pasadena.  
 District No. 48, Frank G. Martin (R), 745 Sacramento Street, Altadena.  
 District No. 49, Herbert J. Evans (R), 234 N. Canyon Boulevard, Monrovia.  
 District No. 50, Frank W. Wright (R), 309 E. Camilla Street, Whittier.  
 District No. 51, William Mosely Jones (D), 113 N. 21st Street, Montebello.  
 District No. 52, Ben Rosenthal (D), 1926 E. Fourth Street, Los Angeles.  
 District No. 53, E. V. Latham (R), 504 N. Second Street, Alhambra.  
 District No. 54, Wilbur F. Gilbert (D), 3537 The Paseo, Los Angeles.  
 District No. 55, Frank D. Laughlin (D), 1057 Grattan Street, Los Angeles.  
 District No. 56, Thomas J. Cunningham (R), 3065 Tyburn Street, Los Angeles.  
 District No. 57, Kent H. Redwine (R), 1618 N. Las Palmas Avenue, Hollywood.  
 District No. 58, Frank J. Waters (R), 1163 Fourth Avenue, Los Angeles.  
 District No. 59, Charles W. Lyon (R), 1052 Redondo Boulevard, Los Angeles.  
 District No. 60, Geoffrey F. Morgan (R), 478 24th Street, Santa Monica.  
 District No. 61, Ernest O. Voigt (D), 3651 Cardiff Avenue, Los Angeles.  
 District No. 62, Augustus F. Hawkins (D), 1336 E. 40th Street, Los Angeles.  
 District No. 63, Ralph Louis Welsh (D), 1035 W. 31st Street, Los Angeles.  
 District No. 64, John D. McCarthy (D), 179½ Loma Drive, Los Angeles.  
 District No. 65, Gene Flint (D), 116 W. 52nd Place, Los Angeles.  
 District No. 66, James J. Boyle (D), 1918 W. 73rd Street, Los Angeles.  
 District No. 67, Lee E. Geyer (D), 1126 Gardena Boulevard, Gardena.  
 District No. 68, Fred Reaves (D), 583 W. Eighth Street, San Pedro.  
 District No. 69, A. Franklin Glover (D), 1203 N. Temple Street, Compton.  
 District No. 70, John G. Clark (D), 45 Geneva Walk, Long Beach.  
 District No. 71, Harry B. Riley (R), 1551 Elm Avenue, Long Beach.  
 District No. 72, Godfrey A. Andreas (D), W. 17th Street, Upland.  
 District No. 73, Gordon W. Corwin (R), 259 Pacific Avenue, Highland.  
 District No. 74, James B. Utt (R), Skyline Drive, Tustin.  
 District No. 75, Edward Craig (R), 111 West Imperial Highway, Brea.  
 District No. 76, John Phillips (R), 213 N. Fourth Street, Banning.  
 District No. 77, Clarence R. Walker (R), Westmoreland.  
 District No. 78, Ralph W. Wallace (R), 3739 Poe Street, San Diego.  
 District No. 79, Paul A. Richie (D), 4264 Menlo Avenue, San Diego.  
 District No. 80, Charles W. Stream (R), Palm City.

\* See also editorial comment on page 412. Legends: D (Democrat), R (Republican) and Ind (Independent).

## TWENTY-FIVE YEARS AGO\*

### EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. VII, No. 12, December, 1909

From Some Editorial Notes:

*The End of a Volume.*—The present issue completes the seventh volume of your *Journal*, which compares very favorably with the preceding volumes. The *Journal* is your own journal; the articles in it are your own productions, and if they do not come up to the mark to which you think they should come, it is your own fault. Physicians in California are doing as good work as any in any State in the land, and are doing better work today, on an average, than ten years ago. And your *Journal* has helped somewhat. . . . What the *Journal* shall be is all in the hands of the members of the Society; the better their work for their county society and for the State Society, the better will be the material which goes out to the world in their own *Journal*. Let us all keep eternally at it—improving, building, enlarging, progressing, always striving for better work, for better results, for progress in medicine at home, and for a closer knitting together of our several units into solid societies, each working for the greater benefit of our charge, the public health.

*Animal Experimentation.*—The address of Charles W. Eliot, delivered on Ether Day at the Massachusetts General Hospital, appears in a recent issue of the *Boston Medical and Surgical Journal*. The ex-President of Harvard surveys the field of medicine from a mountain-top, and so broad and comprehensive is his horizon that his view will be of interest to every practitioner. His arguments for animal experimentation deserve a wider reading than the columns of this excellent journal afford. . . .

*Tropical Medicine.*—It is not any longer necessary to emphasize before the medical profession of this State the special position of responsibility to the nation that California occupies in the matter of tropical medicine. The importance of the subject demands a recognition on the part of the whole profession of the Pacific Coast of the various so-called tropical diseases which are now present in, or may at any time invade our territory. . . .

*Cholera in Russia.*—The reports of thousands of deaths from the epidemic of Asiatic cholera now raging in European Russia furnish an instance of a "tropical" disease invading a temperate and arctic region. . . .

*Pellagra.*—Pellagra in the United States is a curious illustration of a disease long unrecognized but found to be common when once the general profession learned to diagnose it. . . .

*Address of Dr. Henry Gibbons, Jr., at the Commencement Exercises, Medical Department, Leland Stanford, Jr., University.*—My few words are but a brief and partial historical sketch of the development of medical education in California. Fifty years have elapsed since the establishment of the first medical college on this western coast, largely through the instrumentality of Elias Samuel Cooper, for whom Cooper Medical College was named. I find, by reference to the meager minutes of this early period, that the trustees of the

\* This column strives to mirror the work and aims of colleagues who bore the brunt of Association work some twenty-five years ago. It is hoped that such presentation will be of interest to both old and new members.

(Continued in Front Advertising Section, page 22)

## BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA\*

### BOARD OF MEDICAL EXAMINERS

By CHARLES B. PINKHAM, M. D.  
Secretary-Treasurer

#### News

"The United States Supreme Court in effect yesterday refused to set aside fraud orders issued by the Post Office Department against Dr. Clayton E. Wheeler, self-described gland specialist of San Francisco and Los Angeles. Doctor Wheeler resides at 535 Powell Street. The court declined to review the action of the Federal District Court for Southern California, sustaining the post office orders, according to the Associated Press. Doctor Wheeler is accused of making misleading statements in his advertising literature, including exaggerated claims as to the effectiveness of his gland treatment for senility. Doctor Wheeler claimed that the fraud order was depriving him of daily mail containing checks and money orders. His practice of selling home treatment by mail has been discontinued, Doctor Wheeler said." (San Francisco *Chronicle*, November 6, 1934.)

"From time to time the question of whether or not the giving of an anesthetic constitutes the practice of medicine and comes under the Medical Practice Act, has been raised by certain doctors of medicine. . . . Although legal opinions have been rendered on the subject from time to time to the effect that the giving of an anesthetic *per se* is not the practice of medicine, there has been no record of the case having been tried in the courts. . . ." said an article published in the *Western Hospital Review*, September, 1934, issue, which article contained in full the findings of fact and conclusions of law, as rendered by Judge Allen B. Campbell in a case tried in Los Angeles.

"Dr. R. D. Brisbane, Superintendent of Sutter Hospital, last night warned Sacramento residents against what he termed the fake sale of health service. Two men, Doctor Brisbane said, are operating here, selling health insurance for a dollar a month, which supposedly entitles the purchaser to hospitalization in any hospital and choice of any doctor in case of illness. The Superintendent said the California Hospital Association has not authorized the sale of such insurance." (Sacramento *Union*, October 19, 1934.)

"Dr. Robert E. Haslett, Chico chiropractor, formerly of Sacramento, is free on a \$2,000 bond following his arrest and arraignment yesterday on a charge of violation of Section 274 of the Penal Code by performance of an abortion on an Orland wife, already the mother of three children. . . . Haslett was arraigned before Justice of the Peace L. E. Newton, who issued the warrant. The complaint recites the operation was performed in Chico on October 22, last, and that it was not necessary to preserve the patient's life. . . ." (Sacramento *Bea*, November 14, 1934.)

"One woman was shot and killed and another critically wounded today and shortly afterward Dr. William J. Jacobs, forty-five, prominent physician, was placed under arrest on suspicion of murder. . . ." (Press dispatch, dated Santa Barbara, November 7, and printed in the San Francisco *Examiner*, November 8, 1934.)

"His motion for a new trial denied, Augusto Monasterio, convicted recently on two counts of practicing medicine without a license, was sentenced yesterday

\* The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6.

(Continued in Front Advertising Section, page 23)

## ELLIOTT TREATMENT

*For acute and chronic infections involving*

The pelvis, ovaries, Fallopian tubes and prostate; inflammation of sinuses and bladder; leukorrhea and dysmenorrhea.

**E**LLIOTT TREATMENT provides, internally, with controlled pressure, constant dry heat as high as 130° F. to the involved areas.

We are the original designers and manufacturers of Treatment Regulators and "Anode" applicators for administering the Elliott Treatment.

Our appliance was used exclusively in obtaining all of the clinical data and medical background on the Elliott Treatment.

Articles on the Elliott Treatment have appeared in the Journal of the American Medical

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**Lilly Research Laboratories Formally Opened.**—More than a thousand investigators and research workers were present at the formal opening of the new Lilly Research Laboratories at Indianapolis on October 11, 1934. The gathering of distinguished visitors representing many noted bodies and famous institutions in this and foreign countries as well, assembled in a mammoth tent, erected for the occasion, adjacent to the Lilly Laboratories.

At the formal opening exercises, in the afternoon, Eli Lilly, head of the Lilly organization, presided as chairman. Mr. J. K. Lilly, chairman of the board of directors, was introduced and responded briefly on

"Research in Manufacturing Pharmacy" from the time of his entrance in the organization in 1876 up to the present, when there is so much evidence of the fact that medical science, in becoming an integral part of our social structure, has, in turn, become in a broad measure dependent upon industrial development.

Following Mr. Lilly's remarks, Dr. Irving Langmuir, director of research for the General Electric Company, discussed "The Unpredictable Results of Research." The speaker stressed the point that fundamental research should be pursued by industrial corporations regardless of any immediate possible commercial return therefrom. He gave an account of his





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purely theoretical gas adsorption studies which ultimately led to the development by the General Electric Company of their present highly efficient electric-light bulb.

The chairman then introduced Sir Frederick Banting, who talked on "The Early History of Insulin." He gave an account of the early experiments conducted by Doctor Best and himself which first demonstrated the existence of Insulin, and expressed his great appreciation of the cooperation which he and his associates had received from the staff of the Lilly Research Laboratories in the development of a practical, large-scale procedure for the production of Insulin.

Sir Henry Dale, director of the National Institute for Medical Research, London, and secretary of the Royal Society, was the last speaker on the afternoon program. He chose as his topic "Chemical Ideas in Medicine and Biology." Sir Henry spoke of the immediate objectives of research in such laboratories as those of Eli Lilly & Company, and of their natural and proper differences from those of the laboratories supported by academic or public endowment. It was his thought, however, that the differences in result for the progress of medical science are often more formal than real. He expressed the hope that the growth of cooperation between those working in these different spheres might yet bring to many the rather rare privilege that had come to him of migrating from one to the other and back again, and thus of knowing at first-hand the best that each can offer.

He did not suggest that palliative treatment no longer existed in medical practice or that its complete elimination was expected or even desirable. He cited the fact that alleviation of symptoms not only brings the richest reward of gratitude, but said that it might be the most urgent medical duty.

Sir Henry referred to the fact that he was speaking in the presence of Sir Frederick Banting and in the place where the large-scale production of Insulin had

(Continued on Next Page)

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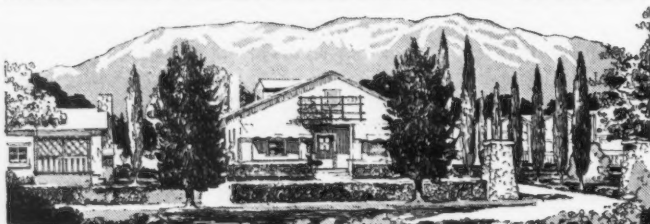
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(Continued from Preceding Page)

its earliest organization, and that he felt he need not remind his audience of the revolutionary change which has taken place in the treatment of a disease that only a few short years ago was the despair of the physician.

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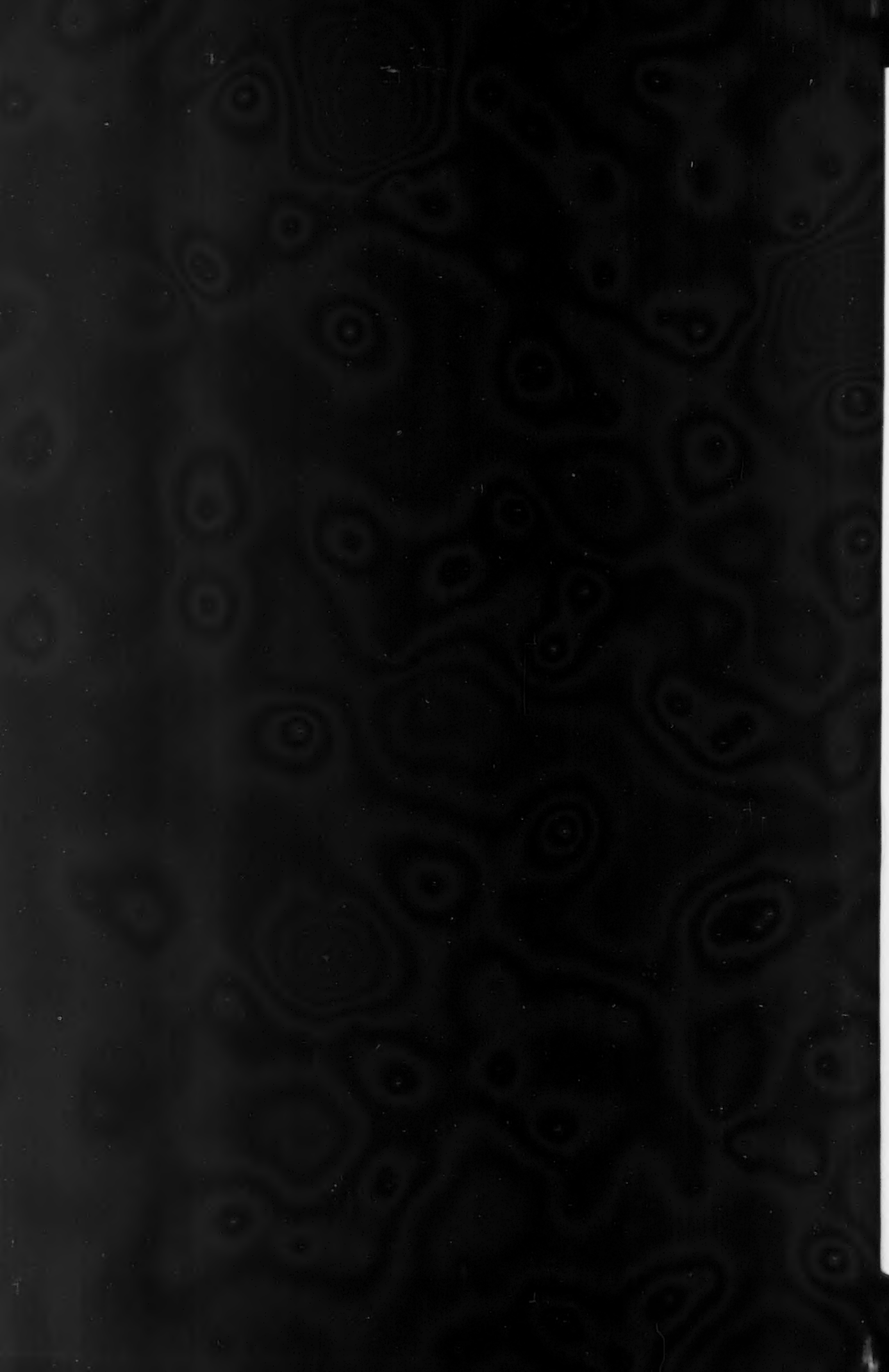
1. Patients are given individual care by experienced tuberculosis specialists. The patient is treated according to his individual needs.
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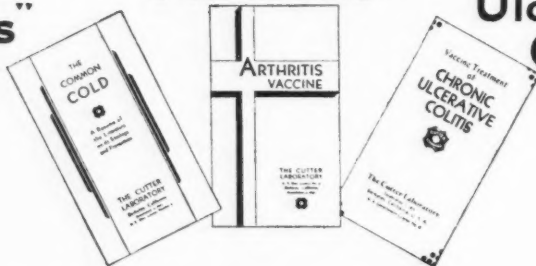


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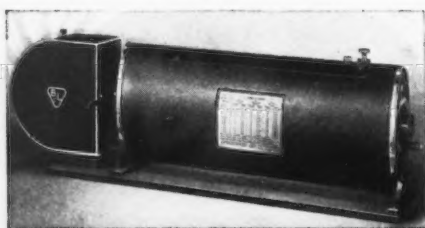
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